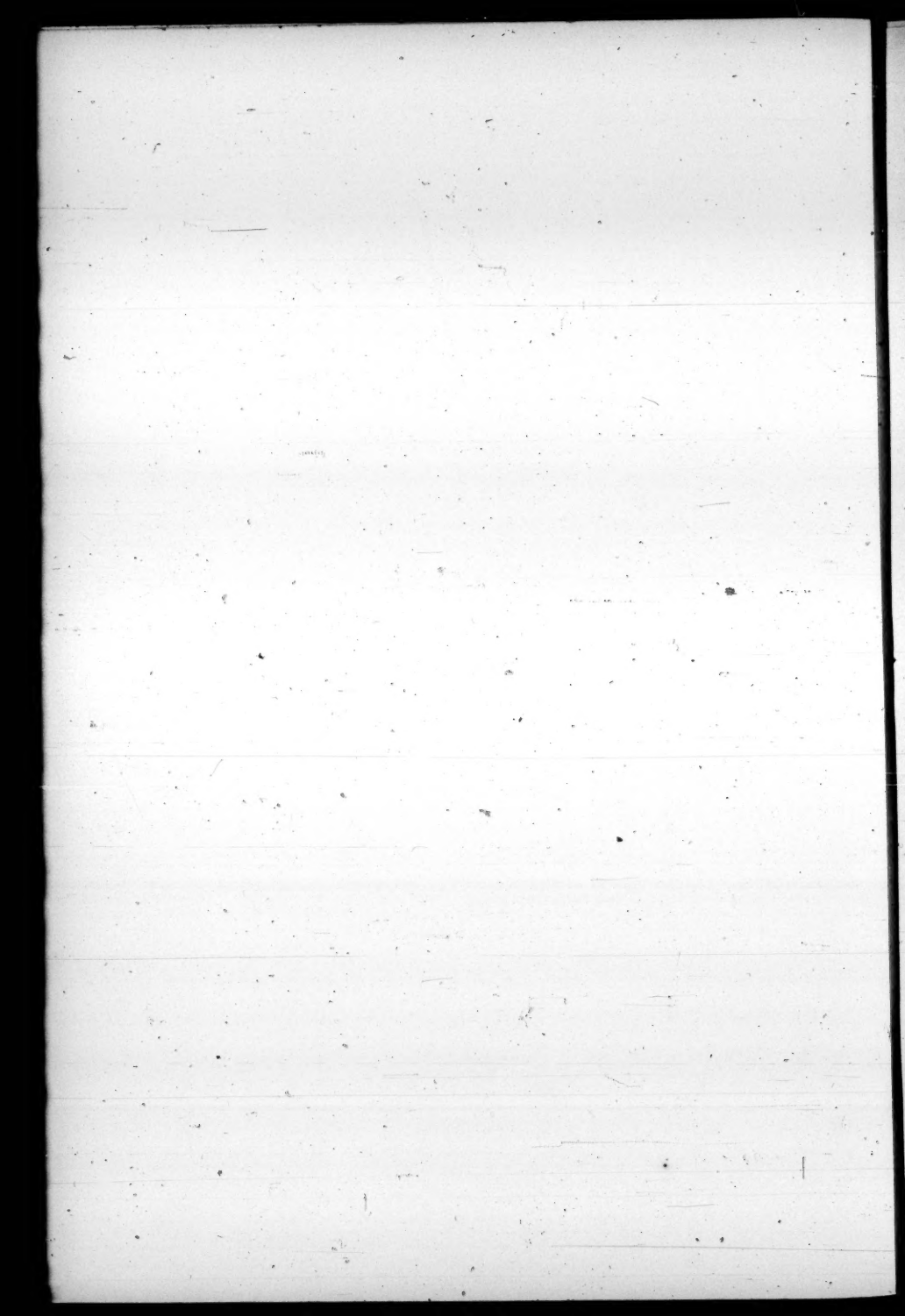
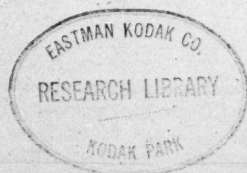




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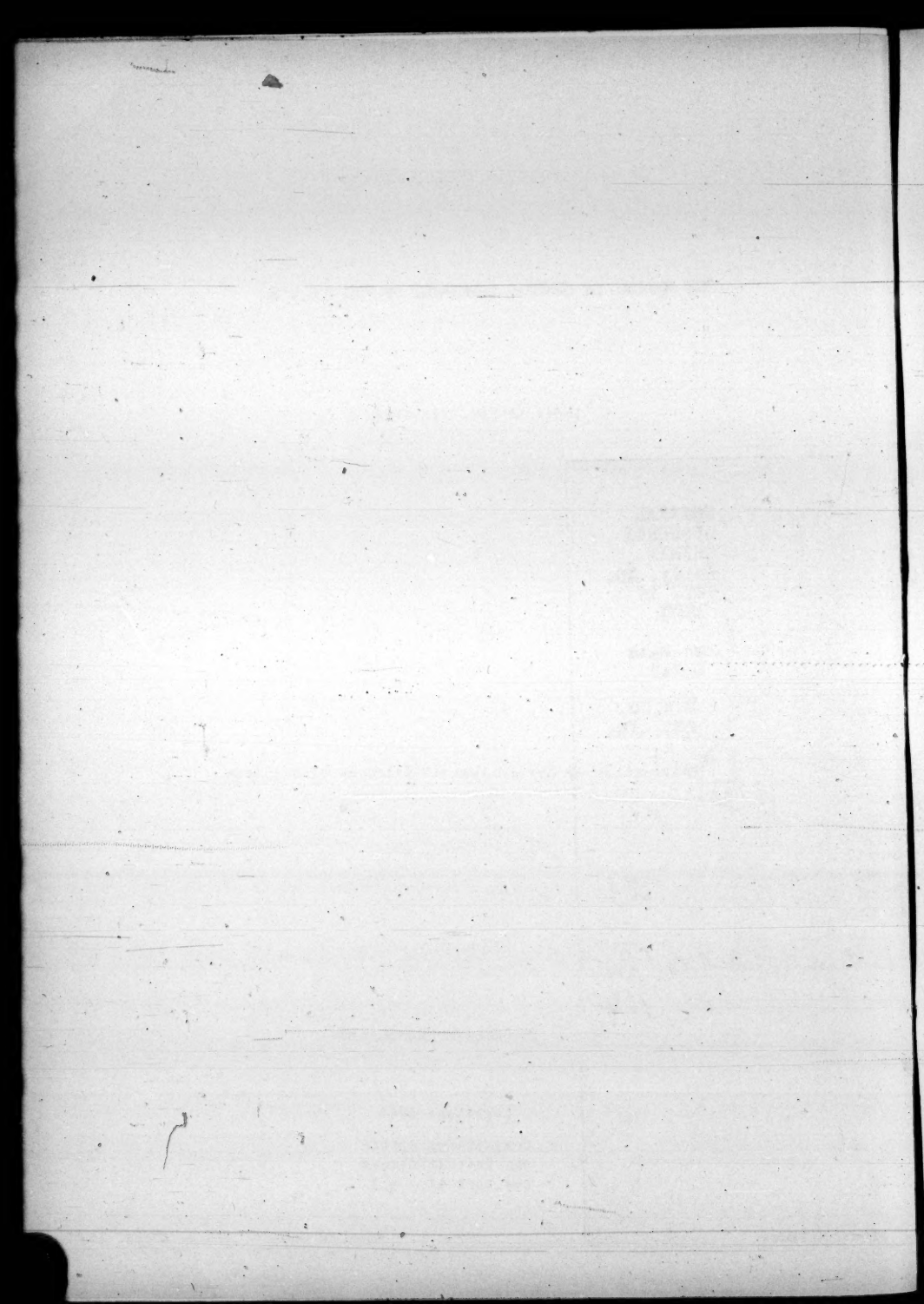


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- $C_4H_2OBr_2$ 2,3-Dibromofuran, synthesis, dipole moment, 761.
- C_4H_5NS Allyl isothiocyanates, in the system with diphenylamine, a-275.
- $C_4H_8O_2N_2$ Diazoacetate, reaction with vinyl butyl ether in presence of copper, a-355; mechanism of reaction with unsaturated compounds, a-173.
- $C_4H_8O_2F_2$ β -Fluoroethylfluoroacetate, preparation, 99.
- C_4H_7OCl 1) Oxychloride of n-butyric acid, cleavage of phenyldichlorarsine and diphenylchlorarsine in presence of aluminum chloride, 119.
- 2) Oxychloride of isobutyric acid, cleavage of phenyldichlorarsine and diphenylchlorarsine in presence of aluminum chloride, 119.
- 3) Chloroisobutyraldehyde.

oxime, preparation, properties, attempted saponification, 612.

$C_4H_7O_2F$ β -Fluoroethylacetate, preparation, 102.

$C_4H_9OCl_2$ Dichlorobutanol, formation, 278.

$C_4H_9O_3N_2$ 1-Nitro-2-nitroso-2-methylpropane, formation, 613.

C_4H_9OF 1-Fluoro-2-methylpropanol-2, preparation, 90.

C_4H_9OCl 1) Chloromethylpropyl ether, hydrolysis, 247.

2) Oxime of methylethylketone, halogenation, 282.

C_4H_9OBr 1) Bromo ethyl ether, reaction with alkoxy substituents of phosphorous acid esters, 922, 924.

2) Bromomethylpropyl ether, reaction with alkoxy substituents of phosphorous acid esters, 922, 925.

$C_4H_9O_2Cl$ Chlorobutanediol, formation, 278.

$C_4H_9O_2F$ β -Fluoroethyl ether of glycol, formation, 89, preparation 91.

$C_4H_9NCl_2$ 1) Butyldichloroamine, formation, 274.

2) Isobutyldichloroamine, formation, 274.

$C_4H_{10}NCl$ 1) Butylchloroamine, formation, 274.

2) Isobutylchloroamine, formation, 274.

3) β -Dimethylaminoethyl chloride, synthesis, 125.

$C_4H_{11}ON$ 1,4-aminohydroxybutane, preparation, dehydration, a-693.

4. IV

$C_4H_5O_3NS$ Pyrrolesulfonic-2 acid, synthesis, properties, salt, 488.

$C_4H_5O_2ClF$ β -Fluoroethylchloroacetate, preparation, 99.

$C_4H_5O_2BrF$ β -Fluoroethylbromoacetate, preparation, 99.

$C_4H_5O_2IF$ β -Fluoroethyliodoacetate, preparation, 102.

$C_4H_5O_3S_2Ba$ Barium salt, sulfoacetic aldehyde, formation, 768.

C_4H_5OClF β,β -Chlorofluorodiethyl ether, preparation, 94.

$C_4H_5O_2NCl$ 2-Chloro-2-nitrobutane, preparation, 282.

$C_4H_5O_4F_2S$ β,β' -Difluoroethylsulfate, preparation, 97.

Group C_5

5. I

C_5H_{10} Amylene, alkylation of benzene in

the presence of HSO_4AlCl_3 , 301.

C_5H_{12} 1) n-Pentane, nitration nitrogen dioxide, 1473.

2) Isopentane, alkylation by propylene in presence of compounds of boron fluoride, a-649; alkylation of ethylene and isobutylene, a-657.

5. II

$C_5H_4O_2$ Furfural, attempt at sulfonation, 485; condensation arylaminosulfone, 1371.

$C_5H_4O_3$ Pyromucic acid, attempted sulfonation, 485.

C_5H_5N Pyridine, electrical conductivity of the system with acetic acid 1217, condensation with $AsBr_3$, 52; hydrogenation of mixtures of hydrochlorides with hydrochlorides of diethyl- β -pyridylcarbinol, anabasine and nicotine, 930.

C_5H_6O 2-Methylfuran (sylvan), sulfonation, 482.

$C_5H_6O_2$ Furyl alcohol, see methyl ether, $C_6H_5O_2$.

C_5H_7N 1) 1-Methylpyrrole, sulfonation, 489.

2) 2-Methylpyrrole, sulfonation, 489.

C_5H_9O 1) Dimethylacetylenylcarbinol, electrolytic hydrogenation, 61.

2) Ethylidene acetone, synthesis, iodoxidation, bromination, a-158.

$C_5H_9O_4$ Dimethylmalonate, formation, a-373.

$C_5H_{10}O$ 1) Methylpropyl ketone, chemical interaction in system with formic acid, 585.

2) Vinyl propyl ether, properties, acid addition, 257.

3) α -Methylfuranidine, conversion into α -methylthiophane, 700.

4) β -Methylfuranidine, conversion into β -methylthiophane, 701.

$C_5H_{10}O_2$ n-Valeric acid, addition to vinyl alkyl ether, 257.

$C_5H_{10}O_3$ 1) Monovinyl ether of glycerol, preparation, hydrolysis, hydration, cyclization, 1246.

2) Ethoxy ethylidene formate, preparation, properties, 258.

$C_5H_{10}S$ 1) α -Methylthiophane, preparation, 700.

2) β -Methylthiophane, preparation, 701.

$C_5H_{10}S_2$ Mercaptol, from acetone and dimethylenedithiosulfate, preparation, oxidation, 833.

- $C_5H_{12}O$ 1) Isoamyl alcohol, viscosity in chloral system, 149.
 2) Tert.-amyl alcohol, alkylation of benzene in presence of HSO_4AlCl_2 , 302.
 $C_5H_{12}O_2$ Diethylformal, formation, 247.

5. III

- $C_5H_2O_3Br_2$ 4,5-Dibromopyromucic acid, proof of formation, decarboxylation, 761.
 $C_5H_2O_3Br$ 4-Bromopyromucic acid, proof of formation, 762.
 $C_5H_2O_4S$ Monosulfosylvan, preparation, properties, barium salt, 484.
 $C_5H_2O_7S_2$ Sylvandisulfonic acid[(2-methylfurandisulfonic acid-(3,5))], preparation, properties, salt, 483.
 $C_5H_2O_2F_2$ Fluoroisopropyl ester of fluoroacetic acid, 102.
 $C_5H_2O_3F_2$ β,β' -Difluorodiethylcarbonate, preparation, 98.
 C_5H_2OCl 1) 1-Chloro-2-methoxybutene-3, preparation, properties, proof of formation, with bromine, 1044.
 2) 1-Chloro-4-methoxybutene-2, preparation, properties, proof of formation, with bromine, 1044.
 3) Chloroanhydride, action on isovaleric acid, splitting of phenyl-dichlorarsine and diphenylchlorarsine in presence of aluminum chloride, 120.
 C_5H_2OI 1-Iodo-2-methoxybutene-3, preparation, properties, 1046.
 $C_5H_{10}O_2F_2$ β,β' -Difluorodiethyl ether of methylene glycol, preparation, 95.
 $C_5H_{10}O_4S_2$ Dimethylenedisulfonedimethylmethane, preparation, properties, 833.
 $C_5H_{11}ON$ Oxime of methylpropyl ketone, halogenation, 282.
 $C_5H_{11}O_2N$ Nitropentane (secondary), preparation, 1473.
 $C_5H_{11}OCl$ 1) Chloromethylbutyl ether, addition to butadiene, 246; hydrolysis, 247; action upon butyl alcohol, 247.
 2) Chloromethylisobutyl ether, addition to butadiene, 246.

5. IV

- $C_5H_7O_2ClF_2$ 1,3-Fluorochloroisopropyl ester of fluoroacetic acid, preparation, 102.
 $C_5H_7O_3NS$ 1) 1-Methylpyrrolesulfonic acid-(2), preparation, properties, barium salt, 489.
 2) 2-Methylpyrrolesulfonic

acid-(5), preparation, properties, barium salt, 489.

- $C_5H_8O_2IF$ Fluoroisopropyl ester of iodoacetic acid, preparation, 102.
 $C_5H_8OClBr_2$ 1) 1-Chloro-2,3-dibromo-4-methoxybutane, preparation, properties, 1045.
 2) 1-Chloro-3,4-dibromo-2-methoxybutane, preparation, properties, 1044.
 $C_5H_{10}O_2NCl$ 2-Chloro-2-nitropentane, preparation, 282.
 $C_5H_{10}O_2NBr$ 2-Bromo-2-nitropentane, preparation, 283.

5. V.

- $C_5H_7O_2ClFI$ 1,3-Fluorochloroisopropyl ester of iodoacetic acid, preparation, 103.

Group C_6

6. I

- C_6H_6 Benzene, formation, 713; liquid-vapor equilibrium in system with carbon tetrachloride, a-35; hydrogenation with cobalt as catalyst, 413; alkylation in presence of HSO_4AlCl_2 , pseudobutylene, 300; amylene, 301; N-butylchloride, 301; isobutyl chloride, 301; reaction with trichloroethylene in presence of $AlCl_3$, 655; reaction with diphenylmercury, 1133.
 C_6H_{10} 1) Hexine-1, contact isomerization, 265.
 2) Hexine-2, formation, 267.
 3) Hexine-3, formation, 267.
 4) Dipropenyl, formation, 266.
 5) 2,3-Dimethylbutadiene-1,3, preparation, reaction with maleic anhydride, bromination, iodination, 1066.
 6) Cyclohexene, sulfonation, 1475.
 C_6H_{12} Hexene-3, preparation, separation, identification, optical investigation, 58.

6. II.

- C_6H_6O Phenol, density and viscosity of the system with nicotine, a-23; reaction with sulfo acids, a-413; reaction with diethylmercury, 704; with diamylmercury, 709; reaction with diphenylmercury, 1133; with o- and n-ditolylmercury, a-575.
 $C_6H_6O_2$ 1) Pyrocatechol, condensation with benzyl alcohol, 689.
 2) Resorcinol, condensation with

benzyl alcohol, 689; reaction with diethylmercury, 704; with diamylmercury, 710; reaction with o- and n-ditolylmercury, a-575.

3) Hydroquinone, reaction with diamylmercury, 710; with o- and n-ditolylmercury, a-575.

$C_6H_6O_3$ 1) Pyrogallol, reaction with diethylmercury, 705, reaction with diamylmercury, 710, with o- and n-ditolylmercury, a-575.

2) β -Methoxy- γ -pyrone, preparation, constants, 1171.

C_6H_7N 1) Aniline, electrical conductivity of system with acetic acid, 1211; electrical conductivity of system with antimony trichloride, 1429; condensation of salts with acrylonitrile, 1564.

2) α -Picoline, condensation with $AsBr_3$, 51; hydrogenation of mixtures of hydrochloride with hydrochlorides of diethyl- β -pyridyl carbinol, anabasine, and nicotine, 933.

3) β -Picoline, condensation with $AsBr_3$, 52.

C_6H_8O 1) 2-Methylpentyn-3-ol, formation, properties, percentage of the enol form, 1303.

2) Vinyl allyl ketone, reaction with hydrogen sulfide, a-626.

3) Oxide, asymmetric, methyl-methylacetylenylethylene, preparation, hydration, 1301; isomerization, 1302.

4) 2,5-Dimethylfuran, preparation, sulfonation, 484.

$C_6H_8O_2$ 1) Allylacrylate, polymerization, a-127.

2) Methyl ether of furyl alcohol, attempted sulfonation, 485.

$C_6H_8O_5$ Mixed anhydride of monomethyl malonate and acetic acid, preparation, reaction with methyl alcohol, aniline, p-nitrobenzylbromide, a-379.

$C_6H_8N_2$ 1) Phenylhydrazine, azotization, 893.

2) o-Phenylenediamine, condensation with phenylpropionic acid, 1558.

C_6H_9N 1) α -Ethylpyrrole, synthesis, properties, a-168.

2) 2,4-Dimethylpyrrole, sulfonation, 490.

3) 2,5-Dimethylpyrrole, sulfonation, 490, 1368.

C_6H_9Cl 3-Chloro- β -methylpentyn-1-ol, reaction with silver acetate, 77.

$C_6H_{10}O$ 1) Mesityl oxide, bromination, in-

troductioin of the iodoxy group, Grignard reaction, 1111, 1113, 1115; decomposition on aluminosilicate catalyst, 1081.

2) Cyclohexanone, reaction with diphenylmercury, 1133.

$C_6H_{10}O_2$ 2-Methylpentyn-3-diol-1,2, preparation, dehydration, 1301.

$C_6H_{10}O_3$ Acetoacetic ester, magnesium derivatives, reaction with 1-methoxy-5-chloropentene-3, 1030.

$C_6H_{12}O_2$ 1) Vinylbutyl ether, properties, mixed with acids, 256; reaction with ethyl diazoacetate in the presence of copper, a-355; sulfonation in the reaction with pyridine sulfotrioxide, 767.

2) Vinylisobutyl ether, properties, mixed with acids, 256.

3) α -Ethylfuranidine, conversion into α -ethylthiophane, 700.

4) β -Ethylfuranidine, conversion into β -ethylthiophane, 701.

$C_6H_{12}O_3$ 1) Propoxyethylidene formate, preparation, properties, 258.

2) Ethoxyethylidene formate, preparation, properties, 258.

$C_6H_{12}O_6$ Glucose, electrolytic reduction, a-93; dioxanthogenide diacetone glucose, 821.

$C_6H_{12}S$ 1) α -Ethylthiophane, preparation, 700.

2) β -Ethylthiophane, preparation, properties, 701.

$C_6H_{12}S_2$ 1) Mercaptol from acetone and trimethylenedithiosulfate, preparation, oxidation, 831.

2) Mercaptol from methyl ethyl ketone and dimethylenedithiosulfate, 833.

$C_6H_{13}N$ α -Ethylpyrrolidine, synthesis, a-170.

$C_6H_{14}O$ 1) 2,2-Dimethylbutan-1-ol, synthesis, properties, 106.

2) Diisopropyl ether, preparation, 937.

$C_6H_{14}O_3$ Diethyl ether of dimethylene glycol, preparation and properties, 1477.

$C_6H_{15}N$ 1) Hexylamine, reaction with chloramine, 274.

2) Triethylamine, reaction with chloramine, 275.

6. III

$C_6H_3OCl_3$ 2,4,6-Trichlorophenol, reaction with metallo-organic compounds,

- a-107; reaction with diethylmercury, 706, with diamylmercury, 710.
- $C_6H_3OBr_3$ 2,4,6-Tribromophenol, reaction with diethylmercury, 706, with diamylmercury, 710, with o- and p-ditolylmercury, a-575.
- $C_6H_3O_7N_3$ 2,4,6-Trinitrophenol, reaction with o- and p-ditolylmercury, a-575.
- $C_6H_4OCl_2$ 2,4-Dichlorophenol, reaction with diethylmercury, 706, with diamylmercury, 710.
- $C_6H_5O_3N$ 1) o-nitrophenol, reaction with diethylmercury, 707, with diamylmercury, 710.
- $C_6H_4O_3N_2$ m-Nitrosnitrobenzene, formation, 235.
- $C_6H_4O_4N_2$ m-Dinitrobenzene, formation, 235.
- $C_6H_4O_5N_2$ 2,4-dinitrophenol, nitration, 474.
- C_6H_5OBr p-Bromophenol, reaction with diethylmercury, 705, with diamylmercury, 710, with o- and p-ditolylmercury, a-575.
- $C_6H_5O_2Br$ Bromohydroquinone, reaction with diethylmercury, 705, with diamylmercury 709.
- $C_6H_5O_2N$ Nitrobenzene, a study of the system with formic acid by method of molecular weight, 143; solution, system benzamide - iodine chloride, 1421; solution, system KBr - IBr and $AlBr_3$ - IBr, 1191; electrical conductivity, viscosity and specific gravity in the system NH_4Br - Al_2Br_6 - nitrobenzene, 153.
- $C_6H_5O_3N$ 1) o-nitrophenol, reaction with o- and p-ditolylmercury, a-575; nitration, 473.
- 2) p-Nitrophenol, reaction with metallo-organic compounds, a-106; reaction with o- and p-ditolylmercury, a-575; nitration, 473.
- C_6H_5ClHg Phenylmercury chloride, formation, 714.
- $C_6H_5Cl_2As$ Phenylchlorarsine, cleavage of the oxychlorides of isovaleric, butyric, isobutyric and propionic acids in presence of aluminum chloride, 119.
- C_6H_5BrMg Phenylmagnesium bromide, reaction with diacetyl, 674; reaction with benzoyl chloride, 681.
- $C_6H_5O_3S$ Benzene sulfonic acid, reaction with phenol, a-415.
- C_6H_5NC1 1) p-Chloraniline, condensation of acetate with acrylonitrile, 1569.
- 2) m-Chloraniline, condensation of acetate with acrylonitrile, 1569.
- C_6H_7ON 1) N-acetylpyrrole, sulfonation, a-591.
- 2) 2-Acetylpyrrole, sulfonation, a-591.
- $C_6H_7N_2Cl$ 3,4-Diaminochlorobenzene, condensation with benzoic acid, 1561.
- $C_6H_5O_4S$ 2,5-Dimethylfuransulfonic acid-3, preparation, salt, properties, 484.
- C_6H_5OCl 4-Methyl-5-chloropentene-2-ol-4, synthesis with KOH, 1300.
- $C_6H_{10}OS$ 2-Methyltetrahydro-1-thiopyran-4-one, preparation, properties, semicarbazone, conversion into sulfone, a-625.
- $C_6H_{10}O_3S$ Sulfone of 2-methyltetrahydro-1-thiopyran-4-one, preparation, properties, a-625.
- $C_6H_{11}OCl$ 1) 1-Methoxy-3-chloropentene-4, action on Na-alkylacetoacetic ester, 1031.
- 2) 1-Methoxy-5-chloropentene-3, action on Mg-Acetoacetic ester, 1030, on Na-acetoacetic ester, 1030.
- 3) 1-Chloro-4-ethoxybutene-2, preparation, properties, 1047.
- 4) 1-Chloro-2-ethoxybutene-3, preparation, properties, action with bromine, 1047.
- $C_6H_{11}OBr$ 1-Bromo-2-ethoxybutene-3, preparation, properties, 1050.
- $C_6H_{11}OI$ 1-Iodo-2-ethoxybutene-3, preparation, properties, action with KOH, 1050.
- $C_6H_{12}O_2Br_2$ Dibromide from dimethyl ether of erythroglycol, 1045.
- $C_6H_{12}O_2F_2$ β, β' -Difluorodiethylacetal, preparation, 95.
- $C_6H_{12}O_4S_2$ 1) Dimethylenedisulfonemethyl-ethylmethane, preparation, properties, 833.
- 2) Trimethylenedisulfonemethylmethane, 831.
- $C_6H_{12}O_7S_2$ Sulfonic acid from cyclohexane, barium salt, preparation, 1470.
- $C_6H_{13}O_2N$ 4-Hydroxy-3-methoxypiperidine, synthesis, properties, 1171.
- $C_6H_{14}O_6S_2$ Sulfonation products of n-butylvinyl ether, 767.
- $C_6H_{14}NCl$ 1) β -Diethylaminoethyl chloride, synthesis, 125; condensation with

the potassium salt of p-acetylamino-benzenesulfonic acid, 125.

2) Chlorohexylamine, formation, 274.

$C_6H_{14}NF$ β -Fluoroethylamine, preparation, picrate, 98.

6. IV

$C_6H_2O_7N_3Cl$ 2,4,6-Trinitro-m-chlorophenol, formation, 237.

$C_6H_3O_5N_2Cl$ 4,6-Dinitro-3-chloro-1-hydroxy benzene, formation, 237.

C_6H_4ONCl p-Nitrochlorobenzene, formation, 235.

$C_6H_4O_2NCl$ 1) o-Nitrochlorobenzene, formation, 237.

2) p-nitrochlorobenzene, formation, 235.

$C_6H_5O_3ClS$ p-chlorobenzenesulfonic acid, reactions with phenol, a-418.

$C_6H_7O_4NS$ 2-Acetylpyrrolesulfonic -4-acid, preparation, barium salt, oxidation, a-593.

$C_6H_7O_7NS_2$ 1) 1-Acetylpyrroledisulfonic-(2,4)-acid, preparation, barium salt, oxidation, a-594.

2) 1-Acetylpyrroledisulfonic-(2,5)-acid, preparation, barium salt, oxidation, a-594.

3) 1-Acetylpyrroledisulfonic-(3,5)-acid, preparation, barium salt, oxidation, a-594.

$C_6H_9O_3NS$ 1) 2,4-Dimethylpyrrolesulfonic-(2) acid, preparation, properties, barium salt, 490.

2) 2,5-Dimethylpyrrolesulfonic-(3) acid, barium salt, preparation, properties, oxidation, 1368.

$C_6H_9O_6NS_2$ 2,5-Dimethylpyrrolesulfonic-(3,4) acid, barium salt, preparation, properties, oxidation, 1368.

$C_6H_{11}OClBr_2$ 1) 1-Chloro-2,3-dibromo-4-ethoxybutane, formation, properties, 1048.

2) 1-Chloro-3,4-dibromo-2-ethoxybutane, formation, 1047.

$C_6H_{12}O_3F_3P$ Tri- β -fluoroethylphosphite, preparation, 96.

$C_6H_{12}O_4F_3P$ Tri- β -fluoroethylphosphate, preparation, 96.

$C_6H_{12}O_8S_2Ba$ Barium salt sulfonation product of n-butyl vinyl ether, preparation, hydrolysis, 767.

6. V

$C_6H_5O_2NCl_2S$ Benzosulfodichloramide, re-

action with divinyl in alcohol solution, 1044.

$C_6H_5O_2NBr_2S$ Benzosulfodibromamide, reaction with divinyl in ethyl alcohol, 1050.

Group C7

7. I

C_7H_8 Toluene, sequence of potential for metals in same, a-517; hydrogenation with cobalt as catalyst, 413.

C_7H_{10} 3-Methylhexene-2-yne-4, formation, oxidation, 80.

C_7H_{12} 1) 2,4-Dimethylpentadiene-1,3, synthesis, properties, introduction of an iodoxy group, 1064.

2) Methylene cyclohexane, sulfonation, 1470.

C_7H_{14} 1,1,2,2-Tetramethylcyclopropane, synthesis, 1069.

C_7H_{16} N-Heptane, nitration with nitric acid, 1465.

7. II

C_7H_8O Benzaldehyde, formation from benzyl alcohol, a-149.

$C_7H_8O_2$ 1) Salicylic aldehyde, reaction with diphenylmercury, 1132; condensation with acrylaminosulfone, 1371.

2) Benzoic acid, system with ethylene diamine, 631; amidation by sulfamide, a-677.

$C_7H_8O_3$ Salicylic acid, system with ethylene diamine, 632.

C_7H_7Cl Benzyl chloride, polycondensation, 647.

C_7H_8O 1) 1,3-Dimethyl-1-cyclopentene-4,5-dione, preparation, quinoxaline, condensation with 2,2-dimethyl-4-vinyl-3,6-dihydropyran, a-221.

2) Benzyl alcohol, acid-free esterification, a-149; condensation with resorcinol and pyrocatechol, 689.

3) p-Cresol, reaction with metallo-organic compounds, a-106; sulfo acids, a-415.

4) Cresol (o-, m-), reaction with sulfo acids, a-416.

5) Anisole, reaction with diphenylmercury, 1133.

C_7H_9N Benzylamine, reaction with chloroamine, 274.

$C_7H_{10}O$ 1) Allylisopropenyl ketone, reaction with hydrogen sulfide, a-626.

- 2) 1,3-Dimethyl-1-cyclopentene-5, condensation with 2,2-dimethyl-4-vinyl-3,6-dihydropyran, a-219; oxidation of dione, a-221.
- C₇H₁₀N₂ 3,4-Toluylenediamine, condensation with acid, 1558.
- C₇H₁₁N 1) 1,2,5-Trimethylpyrrole, sulfonation, 1369.
2) 2,3,5-Trimethylpyrrole, sulfonation, 1370.
- C₇H₁₁Cl 3-Chloro-3-methylhexyne-4, preparation, properties, action with silver acetate, 80; reaction with organo-magnesium compounds, 1293.
- C₇H₁₂O 1) Methyl ethyl methylacetylenylcarbinol, preparation, 80; action with HCl, 81; action with PCl₃, 81; action with acetic anhydride, 81.
2) Butylidene acetone, bromination, introduction of an iodoxy group, Grignard reaction, 1109.
- C₇H₁₂O₂ 2,2-Dimethyltetrahydro-4-pyrone, synthesis, condensation with acetylene, a-216.
- C₇H₁₂O₃ 1) 1-3-Divinyl ether of glycerol, preparation, hydrolysis, hydration, cyclization, 1246.
2) Methylacetoacetic ester, sodium derivatives, reaction with 1-methoxy-5-chloropentene-3, 1030.
- C₇H₁₂O₄ 1) N-Butylmalonate, preparation, properties, a-375, mixed anhydrides with acetic acid, a-376.
2) Mono-tert.-butylmalonate, preparation, properties, a-376.
- C₇H₁₃N 1) p-Allylpyrrolidine, synthesis, picrate, a-169.
2) Quinuclidine, synthesis, 1379, hydrochloride, 1381.
- C₇H₁₄O 1) Heptyl aldehyde, condensation with arylaminosulfone, 1371.
2) Isoamyl vinyl ether, properties, addition of acid, 257; sulfonation upon reaction with pyridine sulfotrioxide, 768.
3) α-propylfuranidine, conversion into α-propyl thiophane, 700.
- C₇H₁₄O₃ 1) Propoxyethylidene acetate, preparation, properties, 258.
2) Ethoxyethylidenepropionate, preparation, properties, 258.
- C₇H₁₄O₅ Trimethyl-d-erythronic acid, preparation, a-574.
- C₇H₁₄S 1) α-Propylthiophane, preparation,

properties, 700.

2) β-Propylthiophane, preparation, properties, 701.

C₇H₁₄S₂ Mercaptol from methylethyl ketone and trimethylenedithiosulfate, preparation, properties, oxidation, 832.

C₇H₁₆O 1) Heptanol-2, synthesis, properties, 107.

2) 2-Methylhexanol-5, synthesis, properties, 107.

3) 2,2-Dimethylpentanol-5, synthesis, properties, 106.

C₇H₁₆O₂ Dipropylformal, formation, 247.

7. III

C₇H₄O₃Cl₂ 3,5-Dichloro-4-hydroxybenzoic acid, synthesis, 1161.

C₇H₅OCl Benzoyl chloride, reaction with mesitylmagnesium bromide, o-tolylmagnesium bromide, α-naphthylmagnesium bromide, p-tolylmagnesium bromide and phenylmagnesium bromide, 681.

C₇H₅O₂Cl 1) o-Chlorobenzoic acid, amidation, a-680.

2) p-Chlorobenzoic acid, amidation, a-680.

C₇H₅O₄N 1) m-Nitrobenzoic acid, amidation, a-680.

2) p-Nitrobenzoic acid, amidation, a-679.

C₇H₅O₇N₃ Trinitro-m-cresol, formation, 236

C₇H₅NS 1) Benzothiazol, synthesis of quaternary salts, 1519.

2) Mustard oil of phenyl, in the system with diphenylamine, a-275.

C₇H₅O₃N₂ 1) m-Nitrobenzamide, preparation, a-680.

2) p-Nitrobenzamide, preparation, a-679.

C₇H₅O₄N₄ 5-Methoxy-6-nitrobenzene, synthesis, properties, acetylation, 509.

C₇H₅O₅N₂ 4,6-Dinitro-2-methyl-1-hydroxybenzene, formation, 236.

C₇H₇ON 1) Benzamide, preparation, a-678; system with iodine chloride, 1417.

2) p-Nitrosotoluene, formation, 235.

C₇H₇O₂N 1) o-Nitrotoluene, formation, 236.

2) p-Nitrotoluene, formation, 235.

C₇H₇ClHg p-Tolylmercury chloride, nitration, 235.

C₇H₇BrMg 1) o-Tolylmagnesium bromide, reaction with diacetyl, 673; reaction with benzoyl chloride, 681; reaction with acetyl chloride, 685.

2) p-Tolylmagnesium bromide, reaction with benzoyl chloride, 681.

C₇H₉ON₂ β-Formylphenylhydrazide, azotization, 895.

C₇H₉NS N-Methyl-o-aminothiophenol, synthesis, properties, 1532; condensation with acid chloroanhydride, 1519.

C₇H₁₀ON₂ 3,4-Diaminoanisole, condensation with carboxylic acid, 1560.

C₇H₁₀NBr Ethylpyridine bromide, condensation with AsBr₃, 53.

C₇H₁₂OS 2,5-Dimethyltetrahydro-1-thiopyran-4-one (cis- and trans- form), synthesis, properties, semicarbazone, 2,4-dinitrophenylhydrazones, cis- trans-isomerization, sulfone, a-626, a-629; condensation with acetylene, a-640; reaction with C₂H₅MgBr, a-641.

C₇H₁₂O₃S Sulfone, 2,5-Dimethyltetrahydro-1-thiopyran-4-one (cis- and trans- form), preparation, properties, cis-, trans- isomerization, a-627.

C₇H₁₃OCl 1) 1-Ethoxy-3-chloropentene-4, formation, 245; isomerization, 247; action of organo-magnesium compounds, a-349, action of magnesium, a-352.

2) 1-Ethoxy-5-chloropentene-3, formation, 246; isomerization, 247; action of organo-magnesium compounds, a-350, action of magnesium, a-351.

C₇H₁₄OS₂ 2-Methylhexane-1,5-dithiol-3-one, preparation, properties, cyclization, a-629.

C₇H₁₄O₂Br₂ Dibromide of methylethyl ether of erythroglycol, 1045.

C₇H₁₄O₄S₂ Trimethylene-disulfone-methylethyl methane, preparation, properties, 832.

C₇H₁₄O₇S₂ Sulfonic acid of methylene-cyclohexane, barium salt, preparation, 1470.

C₇H₁₆O₈S₂ Sulfonation products of isoamylvinyl ether, 768.

7. IV

C₇H₅O₃NS p-Nitrothiobenzoic acid, salts, methyl, ethyl and benzyl esters, 1187.

C₇H₉ONCl 1) o-Chloroacetamide, preparation, a-680.

2) p-Chloroacetamide, preparation, a-680.

C₇H₇OBrMg 1) o-Anisylmagnesium bromide, reaction with alkyl halides, 666.

2) m-Anisylmagnesium bromide, reaction with alkyl halides, 666.

C₇H₇O₃Cl₂P Mono-(o-methoxy)-phenyl ester of phosphorosodichloride, preparation, properties, 116.

C₇H₉ONS 2-Hydroxybenzothiazole, formation, 736.

C₇H₁₁O₃NS 1) 1,2,5-Trimethylpyrrolesulfonic-(3)-acid, barium salt, preparation, properties, oxidation, 1369.

2) 2,3,5-Trimethylpyrrolesulfonic-(4)-acid, preparation, properties, 1370.

C₇H₁₁O₈NS₂ 1,2,5-Trimethylpyrroledisulfonic-(3,4)-acid, barium salt, preparation, properties, oxidation, 1369.

C₇H₁₄O₈S₂Ba Barium salt, product of sulfonation of isoamylvinyl ether, 768.

7. V

C₇H₅O₂NClS Anilide of chloromethane sulfonic acid, synthesis, properties, 308.

Group C₈

8. I

C₈H₈ Styrene, sulfonation, 1471; reaction with diphenylmercury, 1133.

C₈H₁₀ 1) m-Xylene, equilibrium of the hydrogenation reaction, 1075; nitration in the side chains, 221.

2) o-Xylene, nitration in the side chains, 221.

3) Xylene, hydrogenation with cobalt as catalyst, 413.

C₈H₁₂ β-Tert.-butylvinylacetylene, hydrogenation, sodium derivative, a-521.

C₈H₁₆ 1,3-Dimethylcyclohexane, equilibrium of the hydrogenation reaction with m-xylene, 1075.

8. II

C₈H₈O Coumarone, sulfonation, 485.

C₈H₈O₄ Orthophthalic acid, in system with ethylenediamine, 635.

C₈H₇N Indole, sulfonation, 763.

C₈H₈O 1) m-Tolyl aldehyde, formation, 224.

- 2) o-Toluyaldehyde, formation, 224.
- 3) Acetophenone, reaction with diphenylmercury, 1132.
- $C_8H_8O_2$ 1) Phenylacetic acid, amidation, a-681.
- 2) o-Toluic acid, formation, 227.
- 3) m-Toluic acid, formation, 224.
- 4) Vanillin, condensation with arylaminosulfones, 1371.
- 5) Furfural acetone, reaction with diphenylmercury, 1133.
- C_8H_9F β -Fluoroethylbenzene, preparation, 98.
- $C_8H_{10}O_5$ Acid product of the hydrolysis of 1-butoxycyclopropane-2-carboxylic acid, a-534.
- $C_8H_{11}N$ Dimethylaniline, reaction with chloramine, 276; hydrochloride, reaction with aromatic mercury compounds, 1135.
- $C_8H_{12}O$ 1) 2,5-Dimethylhexyne-3-al, formation, properties, per cent of the enol form, 1308.
- 2) 5-Methyl-1,5-heptadiene-4-one, reaction with hydrogen sulfide, a-629.
- 3) Synthesis of the oxide of asymmetrical isopropylacetylenylethylene, properties, hydration, isomerization, 1307.
- $C_8H_{12}O_2$ 1) 1-Aceto-3-methyl-1,2-pentadiene, preparation, properties, 78.
- 2) 3-Aceto-3-methyl-1-pentyne, preparation, properties, 78.
- $C_8H_{14}O$ 1) 3-Methylheptene-3-one-5, bromination, introduction of an iodoxy group, Grignard reaction, 1109; action of CH_3MgI , 1065.
- 2) 3,4-Dimethylhexene-3-one-5, bromination, introduction of an iodoxy group, Grignard reaction, 1109; action of C_2H_5MgBr , 1065.
- 3) 4,4'-Dimethyl-3-methenepentanone-2, preparation, properties, semicarbazone, a-523.
- 4) Isoamylidene acetone, bromination, introduction of an iodoxy group, Grignard reaction, 1109.
- 5) Butyridenemethylethyl ketone, bromination, introduction of an iodoxy group, Grignard reaction, 1109.
- $C_8H_{14}O_2$ 2,5-Dimethylhexyne-3-diol-1,2, preparation, properties, 1308.
- $C_8H_{14}O_3$ 1) 1-Butoxycyclopropane-2-carboxylic acid, synthesis, separation,

properties, salt, titration, oxidation, hydrolysis, a-527.

- 2) Ethylacetoacetic ester, sodium derivatives, reaction with 1-methoxy-5-chloropentene-3, 1031; reaction with 1-methoxy-3-chloropentene-4, 1031; reaction with octyl chloride, 1034.

$C_8H_{14}S_2$ Mercaptol from cyclohexanol and dimethylenedithiosulfate, 833.

$C_8H_{16}O$ 1) α -Butylfuranidine, conversion into α -butylthiophane, 700.

2) β -Butylfuranidine, conversion into β -butylthiophane, 702.

$C_8H_{16}O_2$ Caprylic acid, amidation of, a-680.

$C_8H_{16}O_3$ 1) Butoxyethylideneacetate, preparation, properties, 255.

2) Isobutoxyethylideneacetate, preparation, properties, 255.

3) Propoxyethylidenepropionate, preparation, properties, 255.

4) Ethoxyethylidenebutylate, preparation, properties, 255.

$C_8H_{16}O_6$ 3,4,5-Trimethyl-d-arabic acid, preparation, calcium salt, oxidation, a-573.

$C_8H_{16}S$ 1) α -Butylthiophane, preparation, properties, 700.

2) β -Butylthiophane, preparation, properties, 702.

$C_8H_{18}O_3$ Diisopropylether of dimethylene glycol, preparation, properties, 1479.

8. III

$C_8H_8O_4S$ Cumaron sulfonic (2) acid, preparation, properties, salt, 485.

C_8H_7OCl p-Chloroacetophenone, semicarbazone, preparation, properties, 1332.

$C_8H_7O_6N_3$ m-Tolyltrinitromethane, formation, 224.

C_8H_7NS 2-Methylbenzothiazole, synthesis of quaternary salts, 1523.

$C_8H_8O_2Hg$ Phenylmercurio acetate, nitration, 236.

$C_8H_8O_3S$ Sulfonic acid from styrene, barium salt, preparation, 1471.

$C_8H_8O_4N_2$ 1) o-Tolyldinitromethane, formation, properties, potassium salt, 227.

2) m-Tolyldinitromethane, formation, 224; properties, potassium salt, 226.

$C_8H_8O_4N_4$ 5-Ethoxy-6-nitrobenzotriazole, synthesis, properties, acetylation, 508.
 $C_8H_8NCl_3$ 2,4,6-Trichlorodimethylaniline, formation, 276.
 C_8H_8ON 1) Acetanilide, condensation with chloral, 642.
 2) Phenylacetamide, preparation, a-681.
 $C_8H_8ON_3$ 5-Ethoxybenzotriazole, synthesis, properties, acetylation, 507.
 C_8H_8OF β -Fluorophenetole, preparation, 95.
 $C_8H_8O_2N$ m-Tolynitromethane, formation, 224.
 $C_8H_8O_3N$ m-Xylynitrate, formation, 224.
 $C_8H_8NCl_2$ 2,4-Dichloromethylaniline, formation, 276.
 $C_8H_{10}ON_2$ β -Acetylphenylhydrazide, azo - formation, 895.
 $C_8H_{10}OHg$ Product of reaction of diethylmercury with phenol, 704.
 $C_8H_{10}NCl$ 1) 2-Chlorodimethylaniline, formation, 266.
 2) p-Chlorodimethylaniline, formation, 266.
 $C_8H_{11}NS$ N-Ethyl-o-aminophenyl mercaptan, synthesis, properties, 1533; condensation with chloroanhydride acids, 1520.
 $C_8H_{12}ON_2$ 3,4-Diaminophenetole, condensation with carboxylic acid, 1560.
 $C_8H_{13}ON$ Supinidine, formation, 1385, a-146; properties, structure, reduction, picrate, 1385.
 $C_8H_{13}OCl$ 2,5-Dimethyl-6-chlorohexyne-3-ol-5, synthesis, properties, KOH reaction, 1306.
 $C_8H_{13}O_2N$ Heliotridine, proof of the structure, a-137.
 $C_8H_{14}OS$ 2,3,6-Trimethyltetrahydro-1-thio-pyran-4-one, synthesis, properties, semicarbazone, sulfone, a-629; condensation with acetylene, a-641; reaction with C_2H_5MgBr , a-642.
 $C_8H_{14}O_3S$ Sulfone of 2,3,6-trimethyltetrahydro-1-thiopyran-4-one, preparation, properties, a-630.
 $C_8H_{14}O_4S_2$ Dimethylenedisulfonehexamethylene, preparation, properties, 833.
 $C_8H_{15}ON$ Isoretronecanol, formation, benzoyl derivative, a-145.
 $C_8H_{15}OCl$ 1) 1-Chloro-2-butoxybutene-3, preparation, properties, action of KOH, action of bromine, 1051.
 2) 1-Chloro-4-butoxybutene-2, preparation, properties, action of

KOH, 1051.

$C_8H_{15}O_2N$ Dihydroxyheliotridane, preparation, picrate, benzoyl derivative, action of thionyl chloride on the benzoyl derivative, a-141.
 $C_8H_{16}O_2Br_2$ Dibromodiethoxybutane, formation, 1050.
 $C_8H_{17}ON$ Caprylamide, preparation, a-680.
 $C_8H_{19}O_3P$ Di- β -methoxyethyl ester of methoxymethylphosphinic acid, preparation, saponification, 921.

8. IV

C_8H_9NBrS 2-Bromomethylbenzothiazole, synthesis, quaternary salt, 1526.
 C_8H_7ONS 1) 2-Methyl-4-hydroxybenzothiazole, preparation, properties, acetylene derivatives, 1157; condensation of ethyl-p-toluenesulfonate with orthoformic ester, 1159.
 2) 2-Methyl-5-hydroxybenzothiazole, preparation, acetylene derivatives, 1157; condensation of the ethyl-p-toluenesulfonate of the acetylene derivative with orthoformic ester, 1158.
 3) 2-Methyl-6-hydroxybenzothiazole, preparation hydrobromide, hydrochloride, ethyl iodide, acetylene derivatives, 1156; condensation of the ethyl iodide with orthoformic ester in pyridine, 1158.
 4) 2-Methyl-7-hydroxybenzothiazole, preparation, ethyl-p-toluenesulfonate, condensation with orthoformic ester in pyridine, 1156.
 $C_8H_7OCl_3Hg$ Product of reaction of diethylmercury with 2,4,6-trichlorophenol, 706.
 $C_8H_7OBr_3Hg$ Product of reaction of 2,4,6-tribromophenol with diethylmercury, 706.
 $C_8H_7O_2ClHg$ 1) o-Chlorophenylmercuroacetate, nitration, 237.
 2) m-Chlorophenylmercuroacetate, nitration, 236.
 3) p-Chlorophenylmercuroacetate, nitration, 235.
 $C_8H_7O_3NS$ 1) Indolesulfonic-(1) acid, preparation, barium salt, 765.
 2) Indolesulfonic-(2) acid, preparation, properties, barium salt, 764.

$C_6H_7O_4NHg$ m-Nitrophenylmercury acetate, nitration, 235.

$C_6H_5ONCl_3$ 1-p-Aminophenyl-1-hydroxy-2,2,2-trichlorethane, preparation, hydrochloride, acetylation, 642.

$C_6H_5OCl_2Hg$ Product of reaction of diethylmercury with 2,4-chlorophenol, 706.

C_6H_5NIS Methyl iodide of benzothiazole, synthesis, 1527.

C_6H_5OBrHg Product of the reaction of diethylmercury with p-bromophenol, 705.

$C_6H_5O_2NS$ N-Carboxymethyl-o-aminophenylmercaptan, synthesis, properties, 1533; condensation with chloroanhydric acid, 1519.

$C_6H_5O_2BrHg$ Product of reaction of diethylmercury with bromohydroquinone, 705.

$C_6H_5O_3NHg$ Product of reaction of diethylmercury with p-nitrophenol, 706.

$C_6H_{15}OCl_2Br_2$ Dibromide of 1-chloro-2-butoxybutene-3, preparation, properties, 1052.

8. V

$C_6H_{10}O_2NClS$ 1) α -Toluide of chloromethane sulfonic acid, synthesis, properties, 309.

2) p-Toluide of chloromethane sulfonic acid, synthesis, properties, 309.

3) m-Toluide of chloromethane sulfonic acid, synthesis, properties, 309.

4) Anilide of α -Chloroethane sulfonic acid, synthesis, properties, 308.

Group C₆

9. I

C_6H_8 Indene, sulfonation, 1471.

C_6H_{10} 1) 1-Phenylpropene-1, reaction with sulfur, a-407.

2) 2-Phenylpropene-1, reaction with sulfur, a-406.

3) 1-Phenylpropene-2, reaction with sulfur, a-408.

C_6H_{12} 1) Isopropylbenzene, formation, 302; hydrogenation reaction in solution, 1075.

2) Mesitylene, nitration in the side chains, 221.

C_6H_{14} 1) 3-Methyloctadiene-2,4, synthesis, properties, demonstration of the structure, 1062.

2) 3,5-Dimethylheptadiene-3,4, formation, 1295.

3) 2,6-Dimethylheptadiene-1,3, synthesis, introduction of an iodoxy group, 1061.

4) 2,3,4-Trimethylhexadiene-1,3, synthesis, introduction of an iodoxy group, 1064.

5) Mixture of 2-ethyl-4-methylhexadiene-1,3 with 3,5-dimethylheptadiene-2,4, preparation, bromination, introduction of iodoxy group, 1065.

6) 3-Methyl-3-ethylhexyne-4, formation, 1295.

7) Butylisopropylacetylene, synthesis, properties, demonstration of structure, 251.

8) Hydrindan, presence in Surakhany gasoline, a-689.

C_6H_{18} Isopropylcyclohexane, hydrogenation reaction in isopropylbenzene solution, 1075.

9. II

$C_6H_6S_3$ 1) 4-Phenyl-1,2-dithiol-3-thione, preparation, properties, oxime, a-406.

2) 5-Phenyl-1,2-dithiol-3-thione, preparation, properties, oxidation, oxime, a-407.

C_6H_7N Quinoline, condensation with arsenic halogenides, 41.

$C_6H_7Br_3$ Tribromohydrindene, preparation, oxidation, a-689.

C_6H_8O Cinnamic aldehyde, reaction with sulfur, a-409; reaction with diphenylmercury, 1133.

$C_6H_8O_4$ Monophenylmalonate, preparation, properties, a-377, mixed anhydride with acetic acid, a-379.

C_6H_8S Thiocinnamic aldehyde, formation, a-409.

C_6H_9N 1) 2-Methylindole, attempted sulfonation, 765; 2) Skatole, sulfonation, 763.

$C_6H_{10}O$ 1) Cinnamic alcohol, reaction with sulfur, a-409.

2) 2-Allylphenol, ester, prep., a-99.

3) Ethylphenyl Ketone, formation, 121.

4) Methyl-o-tolyl ketone, preparation, reduction, 685.

$C_6H_{10}N_2$ 2-Phenylaminopropionitrile, synthesis, properties, hydrochloride, reduction, saponification, 1564.

$C_6H_{12}O_2$ β -Tert.-butylvinylacetylene

carboxylic acid, preparation, properties, ethyl ester, silver salt, a-524.

$C_9H_{13}N$ 2,3,5,6-Tetramethylpyridine, preparation, oxidation, 1351.

$C_9H_{14}O$ 1) 5-Methyl-1,5-octadiene-4-one, action with hydrogen sulfide, a-631.
2) 2,2-Dimethyl-4-vinyl-3,6-dihydropyran, preparation, properties, hydrogenation, condensation with maleic anhydride, dimerization, condensation with 1,3-dimethyl-1-cyclopenten-5-one, condensation with 1,3-dimethyl-3-cyclopentene-5-one, and with 1,3-dimethyl-1-cyclopentene-4,5-dione, a-211.

$C_9H_{14}O_2$ 1) 3-Aceto-3-methylhexyne-4, preparation, properties, 81.
2) 2,2-Dimethyl-4-ethynyltetrahydro-4-pyranole, synthesis, properties, hydrogenation, a-216.

$C_9H_{14}O_3$ Glyceryl vinyl ether, synthesis, properties, hydrolysis, 1245.

$C_9H_{14}O_5$ Mixed anhydride of mono-m-butyl malonate and acetic acid, preparation, reaction with aniline, a-380.

$C_9H_{14}N_2$ 3-Phenylaminopropylamine-1, formation, properties, hydrochloride, picrate, 1565.

$C_9H_{15}N$ N-n-Amylpyrrole, synthesis, properties, a-168.

$C_9H_{16}O$ 1) 1-Butoxy-2,4-pentadiene, formation, 72, 73, action of maleic anhydride, 72.
2) Butylidenemethylpropyl ketone, bromination, introduction of an iodoxy group, Grignard reaction, 1109; reaction with C_2H_5MgBr , 1065.
3) 2,2-Dimethyl-4-vinyltetrahydro-4-pyranole, preparation, properties, hydrogenation, dehydration, a-216.

$C_9H_{16}O_3$ Propylacetoacetic ester, nitroderivatives, reaction with 1-methoxy-5-chloropentene-3, 1032; reaction with 1-methoxy-3-chloropentene-4, 1032.

$C_9H_{16}S_2$ Mercaptol from cyclodhexanone and trimethylenedithiosulfate, preparation, properties, oxidation, 832.

$C_9H_{17}N$ N-Cyclopentylpyrrolidine, synthesis, properties, a-169.

$C_9H_{18}O$ 1) 3-Methyloctene-4-ol-3, synthesis, properties, dehydration, 1062.
2) 1-Ethoxyheptene-3, preparation, properties, oxidation, a-348.

3) Vinyl-n-heptyl ether, synthesis, properties, acid addition, 255.

4) 2,2-Dimethyl-4-ethyltetrahydropyran, preparation, properties, a-217.

$C_9H_{18}O_2$ 1) 1-Butoxy-3-pentene-5-ol, formation, 72.
2) 2,2-Dimethyl-4-ethyltetrahydro-4-pyranol, preparation, properties, a-217.

$C_9H_{18}O_3$ 1) Isopentoxyethylidene acetate, preparation, properties, 255.
2) Butoxyethylidenepropionate, preparation, properties, 255.
3) Isobutoxyethylidenepropionate, preparation, properties, 255.
4) Propoxyethylidenebutyrate, preparation, properties, 255.
5) Ethoxyethylidenevalerate, preparation, properties, 255.

$C_9H_{19}N$ N-n-Amylpyrrolidine, synthesis, a-168.

$C_9H_{20}O_2$ Di-n-butylformal, formation, 247.

9. III.

$C_9H_5O_4N$ 2-Nitroindanedione-1,3, condensation with benzohydrol, 1543; structure, structure of its salts, 1551.

$C_9H_7O_2N$ 2-Phenyloxazolone-5, preparation, properties, 751.

$C_9H_8O_3S$ Sulfonic acids of indene, barium salt, preparation, 1471.

$C_9H_8O_4N_4$ 5-Methoxy-6-nitroacetylbenzotriazol, synthesis, properties, 508.

C_9H_9OCl Ethyl-p-chlorophenyl ketone, synthesis, bromination, 1328.

C_9H_9OBr α -Bromoethylphenyl ketone, reaction with sodium methylate in absolute ether, a-390.

$C_9H_9O_2Cl$ 1) Methyl-p-chlorobenzoyl carbinol, preparation, properties, acetic ester, benzoyl ester, 1330.
2) p-Chlorophenylacetyl carbinol, formation, isomerization, 1328.

$C_9H_9O_3N$ 1) Hippuric acid, conversion into 2-phenyloxazolone-5, 751.
2) Monoanilide of malonic acid, preparation, properties, decarboxylation, a-378.

$C_9H_9O_4N$ 1) 2,5-Dimethylpyridine-3,6-dicarboxylic acid, preparation, 1354.
2) 2,6-Dimethylpyridine-3,5-di-

carboxylic acid, preparation, 1352.

C_6H_5NS 2-Ethylbenzothiazole, synthesis, of quaternary salts, 1524.

$C_6H_5N_2Cl$ 1) 2-(*m*-chlorophenyl)-aminopropionitrile, synthesis, properties, hydrochloride, 1566.

2) 2-(*p*-chlorophenyl)-aminopropionitrile, synthesis, properties, hydrochloride, 1566.

$C_6H_{10}O_4N$ 1',1'-Dinitromesitylene, formation, 228.

$C_6H_{11}ON$ *p*-Dimethylaminobenzaldehyde, condensation with arylaminosulfones, 1371; reaction with secondary aromatic amines, 1515; picrate, 1517.

$C_6H_{11}BrMg$ Mesitylmagnesium bromide, reaction with diacetyl, 671; reaction with benzoyl chloride, 681; acetyl chloride, 685.

$C_6H_{12}ON_2$ N'-Acetyl-N-methyl-N-phenylhydrazine, azotization, 895.

$C_6H_{12}O_2N_2$ β -Carbethoxyphenylhydrazide, azotization, 895.

$C_6H_{14}OS$ 2,5-Dimethyl-4-ethynyltetrahydrothiopyran-4-ol, synthesis, properties, hydrogenation, a-640.

$C_6H_{14}NBr$ Bromous-n-butylpyridine, condensation with $AsBr_3$, 53.

$C_6H_{16}OS$ 2,5-Dimethyl-6-ethyltetrahydro-1-thiopyran-4-one, preparation, properties, semicarbazone, sulfone, a-631.

$C_6H_{16}O_4S_2$ 1) Trimethylene-disulfone-pentamethylene methane, preparation, properties, 832.

2) 1,2-Cyclobutylene-dimethylene-disulfone-dimethylmethane, preparation, properties, 841.

$C_6H_{17}OCl$ 1) 1-Butoxy-5-chloropentene-3, formation, 246; isomerization, 248; action of alcoholic KOH, 70; action of butyl alcohol alcoholate, 72; action of KOH, 72; action of organo-magnesium compounds, a-350; action of magnesium, a-352.

2) 1-Butoxy-3-chloropentene-4, formation, 246; isomerization, 249; action of alcoholic KOH, 72; action of organo-magnesium compounds, a-351; action of magnesium, a-352.

3) 1-Isobutoxy-3-chloropentene-4-, formation, 246.

4) 1-Isobutoxy-5-chloropentene-3-, formation, 246.

$C_6H_{18}OS$ 2,5-Dimethyl-4-ethyltetrahydro-

thiopyran-4-ol, synthesis, properties, a-640.

$C_6H_{18}Cl_2S_2$ Mercaptol from acetone and γ -chloropropylthiosulfate, preparation, oxidation, 838.

$C_6H_{21}O_6P$ 1) Tri- β -methoxyethyl ester of phosphorous acid, preparation, properties, action of cuprous iodide, isomerization under the action of halo-*o*-substituted ethers, 920.

2) Di- β -Methoxyethyl ester of β -methoxyethylphosphinic acid, preparation, saponification, 921.

3) Di- β -methoxyethyl ester of ethoxymethyl-phosphinic acid, preparation, saponification, 922.

9. IV

$C_6H_7O_2NS_2$ Benzothiazolyl-2-thioglycolic acid, preparation, properties, oxidation, ethyl ester, 734.

C_6H_9OClBr α -Bromoethyl-*p*-chlorophenyl ketone, preparation, properties, action with potassium formate in a methanol medium, action of potassium acetate and potassium benzoate, 1328.

$C_6H_9ONS_2$ Benzothiazolyl-2-thioglycol, preparation, properties, oxidation, 735.

$C_6H_9O_2N_3S$ 4-Aminophenyl-2'-aminothiazolyl-5'-sulfone (promizole), condensation with aldehydes, 1371.

$C_6H_9O_3NS$ 3-Methylindolesulfonic-(2) acid, preparation, properties, barium salt, 765.

$C_6H_9NBr_2S$ Ethyl bromide of 2-bromoethyl-benzothiazole, synthesis, properties, 1526.

$C_6H_{10}ON_3Cl$ Semicarbazone of *p*-chloroacetophenone, preparation, properties, 1332.

$C_6H_{10}O_2NCl_3$ 1,1,1-Trichloro-2-oxy-(4'-amino-2'-methoxyphenyl)-ethane, preparation, properties, hydrochloride, acetyl derivatives, a-570.

$C_6H_{10}NIS$ Methyl iodide of 2-methylbenzothiazole, synthesis, 1523.

$C_6H_{11}O_3FS$ β -Fluoroethyl ester of *p*-toluenesulfonic acid, preparation, 97.

$C_6H_{18}O_4Cl_2S_2$ Di-(γ -chloropropyl)-disulfonatedimethylmethane, preparation, properties, reaction with diethylamine, reaction with aniline, reaction with KCN, reaction with caustic alkali,

reaction with sodium p-acetaminophenolate, 839.

9. V

$C_9H_{12}O_2NCIS$ 1) o-Toluide of α -chloroethane sulfonic acid, synthesis, properties, 309.

2) p-Toluide of α -chloroethane sulfonic acid, synthesis, properties, 309.

3) m-Toluide of α -chloroethane sulfonic acid, synthesis, properties, 309.

$C_9H_{12}O_3NCIS$ m-Phenetide of chloromethane sulfonic acid, synthesis, properties, 309.

Group C_{10}

10. I

$C_{10}H_{10}$ 1-Phenylbutadiene-1,3, properties, reaction with sulfur, 1362.

$C_{10}H_{12}$ 1) 1-Phenylbutene-2, properties, reaction with sulfur, 1363.

2) 1-Phenylbutene-3, properties, reaction with sulfur, 1361.

3) 1-Phenyl-1-butene, properties, reaction with sulfur, 1359.

4) 2-Methyl-1-phenylpropene-1, reaction with sulfur, a-402.

$C_{10}H_{14}$ 1) 1-Phenylbutane, reaction with sulfur, 1364.

2) Secondary butylbenzene, formation, 300.

3) Cymene, preparation of the ketone, a-559.

$C_{10}H_{16}$ 1) Camphene, sulfonation, 1471.

2) Carene, oxidation by acetal hydroperoxide, 890.

$C_{10}H_{18}$ 1) 2,6-Dimethyloctadiene-4,6, preparation, properties, proof of structure, 1063.

2) 3,4,5-Trimethylheptadiene-2,4 and 2-ethyl-3,4-dimethylhexadiene, preparation, bromination, 1065.

$C_{10}H_{22}$ 2,7-Dimethyloctane, nitration by nitrogen dioxide, 1461, by nitric acid, 1465.

10. II

$C_{10}H_8O_3$ 2-Hydroxy-1,4-naphthoquinone, formation, 171, 427, 454, 461, 462.

$C_{10}H_8O$ α -Naphthene, reaction with o- and p-ditolylmercury a-575; sulfonation, 1375.

$C_{10}H_8O_2$ 2-Methylindandione-1,3, formation, 461, 462, 463; p-nitrobenzyl ester, 462; semicarbazone, 465.

$C_{10}H_8S$ α -Phenylthiophene, synthesis, properties, 1357.

$C_{10}H_8S_3$ 4-Methyl-5-phenyl-1,2-dithiol-3-thione, preparation, properties, a-402; crystal structure, 1137.

$C_{10}H_9N$ 1) α -Naphthylamine, reaction with chloramine, 269; sulfonation, 1375.

2) β -Naphthylamine, reaction with chloramine, 270.

3) Quinaldine, mechanism of synthesis, 493; synthesis from aniline and ethyleneglycol, 501, synthesis of the homologs, 501.

4) N-Phenylpyrrole, sulfonation, 490.

$C_{10}H_{10}O$ Benzylideneacetone, introduction of an iodoxy group, bromination, 1109; reaction with diphenylmercury, 1133.

$C_{10}H_{10}O_2$ Benzalacetone ether, selectivity of hydrogenation in presence of platinum and palladium, a-541.

$C_{10}H_{12}O$ 1) Methylphenylvinyl carbinol, synthesis, properties, oxidation, ozonization, 1287.

2) m-Allylanisole, preparation, 667.

3) Benzylacetone, formation, 1287.

4) p-Tolylacetone, synthesis, bromination, 1318.

5) Propylphenyl ketone, formation, 120.

6) Isopropylphenyl ketone, formation, 121.

7) Methyl ester of 2-allylphenol, polymerization, a-103.

$C_{10}H_{12}O_2$ 1) Methylphenylacetylcarbinol, preparation, 674.

2) Benzylacetylcarbinol, preparation, oxidation, reaction with CaH_2MgBr , semicarbazone, phenyl osazone, a-548.

3) Methyl lactolide of methylbenzoylcarbinol (1-methoxy-1-phenylpropene-1 oxide), preparation, properties, reaction with phenylhydrazine, hydrolysis, reaction with methanol and HCl, a-390.

4) Dimethylbenzoylcarbinol, action of dimagnesiumdibromoacetylene, 161.

- 5) o-Hydroxyphenylethylmethyl ketone, synthesis, properties, intensity of burning taste, dehydration, methylation, 522.
- 6) p-Hydroxyphenylethylmethyl ketone, synthesis, properties, intensity of burning taste, 522.
- 7) 3,4-Dihydroxyphenylethylmethyl ketone, synthesis, properties, intensity of burning taste, 520.
- 8) Methylstyrylcarbinol ether, formation, a-551.
- $C_{10}H_{12}O_3$ 4-Hydroxy-3-propoxybenzaldehyde, preparation, properties, condensation with acetone, 742.
- $C_{10}H_{12}Cl_2$ 1) 2,7-Dimethyl-3,6-dichlorooctadiene-2,6-yne-4, (hypothetical), formation, 1312.
- 2) 2,7-Dimethyl-2,7-dichlorooctadiene-35, (hypothetical), formation, 1312.
- $C_{10}H_{14}O$ 1) Dimethylbenzyl carbinol, formation, 162.
- 2) Allyl- Δ^1 -cyclohexenyl ketone, reaction with hydrogen sulfide, a-633.
- $C_{10}H_{14}O_2$ 1) 2,7-Dimethyloctadiene-3,5-diol-2,7, action with HCl, 1311.
- 2) Dihydroeugenol, formation, 1570.
- $C_{10}H_{14}N_2$ 1) Nicotine, density and viscosity in system with phenol, acetic acid and water, a-23; viscosity and density in system with butyric, oleic, and stearic acids, a-29; hydrogenation of a mixture of the hydrochlorides of nicotine, pyridine, and α -picoline, 932.
- 2) Anabesine, hydrogenation of mixture of its hydrochloride with the hydrochlorides of pyridine and α -picoline, 932; hydrochloride, nitric acid salt, preparation, properties, 955; reaction with mineral acids, 955.
- $C_{10}H_{16}O$ 1) Unsaturated aldehyde, product of the isomerization of Δ^3 -carene oxide, 890.
- 2) β -Cis-decalone, synthesis, action of methyl magnesium iodide, 304.
- 3) Camphor, reaction with organomagnesium compounds, 1343.
- 4) α -Pinene oxide, action of methyl and ethyl alcohol, 877.
- 5) Camphene oxide, reaction of methyl alcohol, 891.
- 6) Δ^3 -carene oxide, action of methyl-, ethyl-, n-propyl-, n-butyl-, isopropyl-, and tert.-butyl alcohols, 885; isomerization by H_2SO_4 , 889.
- $C_{10}H_{16}O_4$ 1,2-Diaceto-3-methyl-2-pentene, preparation, properties, oxidation, 79.
- $C_{10}H_{16}S$ Diene, dehydration product of 2,3,6-trimethyl-4-vinyltetrahydrothiopyran-4-ol, preparation, properties, condensation with maleic anhydride, hydration, a-642.
- $C_{10}H_{18}O$ 1) Oenanthyldiene acetone, bromination, introduction of an iodoxy group, Grignard reaction, 1111.
- 2) 3-Ethyl-4-methylheptene-3-one-2, introduction of an iodoxy group, bromination, 1111.
- 3) Borneol, formation, 1348.
- $C_{10}H_{18}O_2$ Carene glycol, tertiary ether, 885.
- $C_{10}H_{18}O_3$ 1) Ethyl ester of 1-butoxycyclopropane-2-carboxylic acid, preparation, properties, oxidation, a-366.
- 2) Butylacetoacetic ester, sodium derivatives, reaction with 1-methoxy-5-chloropentene-4, reaction with 1-methoxy-3-chloropentene-4, 1032.
- $C_{10}H_{20}O$ 1) Decanol, condensation with arylaminosulfone, 1371.
- 2) 2,6-Dimethyloctene-4-ol-6, preparation, properties, dehydration, 1063.
- 3) 3,4,5-Trimethylheptene-4-ol-3, preparation, dehydration, 1065.
- $C_{10}H_{20}O_2$ 1-Butoxy-5-methoxypentene-3, preparation, properties, 70.
- $C_{10}H_{20}O_3$ Propoxyethylidenevalerate, preparation, properties, 256.
- $C_{10}H_{20}N_2$ Di-N,N'-pyrrolidylethane, synthesis, properties, a-169.
- $C_{10}H_{20}Si$ Diallyldiethylsilane, synthesis, properties, 621.
- $C_{10}H_{22}O_3$ Dibutyl ether of dimethylene glycol, preparation, properties, 1478.
- $C_{10}H_{22}Hg$ Diamylmercury, preparation, reaction with phenol, 709.
10. III
- $C_{10}H_6O_5N_2$ 2,4-Dinitro- α -naphthol, formation, 950.
- $C_{10}H_7NCl_2$ 2,4-Dichloro- α -naphthylamine,

- formation, 273.
- $C_{10}H_7BrMg$ α -Naphthylmagnesium bromide, reaction with diacetyl, 674; reaction with benzoyl chloride, 683; reaction with acetyl chloride, 686.
- $C_{10}H_8O_4S$ 2-Naphthol-4-sulfonic acid, sodium salt, preparation, action with nitrous acid, 1493.
- $C_{10}H_8O_6S_2$ 1,5-Naphthalenedisulfonic acid, preparation of the acid chloride from its sodium salt, 1589.
- $C_{10}H_9NCl$ 1) 1-Chloronaphthylamine-2, formation, 271.
2) p-Chloro- α -naphthylamine, formation, 273.
- $C_{10}H_{10}O_4N_4$ 5-Ethoxy-6-nitroacetylbenzotriazole, synthesis, properties, 508.
- $C_{10}H_{11}OBr$ α -Bromo-p-tolylacetone, preparation, properties, reaction with potassium acetate, 1318.
- $C_{10}H_{11}O_2N_3$ 1) 1-Acetyl-5-ethoxybenzotriazole, synthesis, properties, saponification, 507.
2) 2(-)-Acetyl-5-ethoxybenzotriazole, synthesis, properties, proof of structure, 505.
- $C_{10}H_{11}O_3N$ Phenaceturic acid, conversion into 2-benzyliden-3-acetyloxazolone-5, 751.
- $C_{10}H_{11}NS$ 2-Propylbenzothiazole, synthesis of the quaternary salt, 1524.
- $C_{10}H_{13}BrMg$ 3-Cymylmagnesium bromide, reaction with diacetyl, 673.
- $C_{10}H_{14}O_2N_2$ 3-Amino-4-acetaminophenetole, synthesis, properties, action of HNO_2 , 506.
- $C_{10}H_{14}O_2Hg$ Product of the reaction of diethylmercury with resorcinol, 704.
- $C_{10}H_{15}ON$ Diethyl- β -pyridyl carbinol, hydrogenation of mixtures of hydrochloride with hydrochlorides of pyridine and α -picoline, 930, 933.
- $C_{10}H_{16}OS$ 1) 2,3,6-Trimethyl-4-ethynyl-tetrahydrothiopyran-4-ol, synthesis, properties, hydration, a-641.
2) 2-Methylhexahydro-1-thiochroman-4-one (cis- and trans-form), synthesis, properties, 2,4-dinitrophenylhydrazones, semicarbazones, isomerization, sulfone, a-633; condensation with acetylene, a-643, reaction with C_2H_5MgBr , a-645.
- $C_{10}H_{16}O_3S$ 1) Sulfone of 2-methylhexahydro-1-thiochroman-4-one (cis- and

trans-form), preparation, properties, action of sodium methylate, a-635.

- 2) Sulfonic acid from camphene, barium salt, preparation, 1471.
- $C_{10}H_{16}N_2S$ p-Aminophenyl- β -dimethylamine-ethyl sulfide, synthesis, dihydrochloride, 126.
- $C_{10}H_{17}O_4Br$ Ethyl- γ -bromopropylmalonate, synthesis, a-109.
- $C_{10}H_{18}OS$ 2,3,6-Trimethyl-4-vinyltetrahydrothiopyran-4-ol, preparation, properties, dehydration, a-641.
- $C_{10}H_{18}NCl$ Chlorolupinan, synthesis, properties, picrate, 133.
- $C_{10}H_{18}ON$ Lupinine, o-ethers, 131.
- $C_{10}H_{20}OS$ 2,3,6-Trimethyl-4-ethyltetrahydrothiopyran-4-ol, preparation, properties, a-642.
- $C_{10}H_{23}O_6P$ 1) Di- β -methoxyethyl ester of propoxymethylphosphinic acid, preparation, properties, 922.
2) Di- β -ethoxyethyl ester of methoxymethylphosphinic acid, preparation, properties, saponification, 924.

10. IV

- $C_{10}H_6O_6Cl_3S_2$ 1,3,5-Trisulfochloride, formation, 1590.
- $C_{10}H_8O_4Cl_2S_2$ Chloroanhydride of 1,5-naphthalenedisulfonyl acid, synthesis, 1589.
- $C_{10}H_7O_3NS$ 1-Nitroso-2-naphthol-4-sulfonic acid, preparation, action of caustic soda, action of aniline, action of o-toluidine, 1494.
- $C_{10}H_9ONCl_4$ 1-p-Acetaminophenyl-1,2,2,2-tetrachloroethane, preparation, action of HCl , 642.
- $C_{10}H_9ONS_2$ Mercaptobenzothiazolyl-2-acetone, preparation, properties, oxidation, 735.
- $C_{10}H_9O_2NS_2$ Sulfoxide, product of the oxidation of mercaptobenzothiazolyl-2-acetone, formation, 736.
- $C_{10}H_9O_3NS$ 1) 1,4-Naphthylaminesulfonic acid, formation, 1375.
2) 1,2-Naphthylaminesulfonic acid, formation, 1375.
3) 1-Naphthylsulfamic acid, formation, 1375.
- $C_{10}H_9O_6NS_2$ 1-Sulfophenylpyrrolesulfonic-(2)-acid, preparation, properties, barium salt, 490.

$C_{10}H_{10}O_8S_2Ba$ Barium salt of monosulfosylvan, see $C_5H_9O_4S$.

$C_{10}H_{10}O_2NCl_3$ 1-p-Acetaminophenyl-1-hydroxy-2,2,2-trichloroethane, preparation, properties, 642.

$C_{10}H_{12}NIS$ 1) Methyl iodide of 2-ethylbenzothiazole, synthesis, properties, 1524.

2) Methyl iodide of 2-methylbenzothiazole, synthesis, 1523.

$C_{10}H_{13}O_2BrHg$ Product of the reaction of diethylmercury with bromohydroquinone, 705.

$C_{10}H_{14}O_2N_2S$ p-Nitrophenyl- β -dimethylaminoethylsulfide, synthesis, hydrochloride, 126, reduction, 126.

$C_{10}H_{14}O_4N_2S$ p-Nitrophenyl- β -dimethylaminoethylsulfone, preparation, properties, hydrochloride, 127, reduction, 127.

$C_{10}H_{16}O_2N_2S$ p-Aminophenyl- β -dimethylaminoethylsulfone, preparation, properties, 128.

$C_{10}H_{18}N_2Cl_2S$ Dihydrochloride of p-amino-phenyl- β -dimethylaminoethylsulfide, preparation, properties, 126.

10. V

$C_{10}H_{10}O_2NIS$ Carboxymethyl iodide of 2-methylbenzothiazole, synthesis, properties, 1523.

$C_{10}H_{14}O_3NClS$ m-Phenetide of α -chloroethane sulfonic acid, synthesis, properties, 309.

$C_{10}H_{15}O_2N_2ClS$ Hydrochloride of p-nitrophenyl- β -dimethylaminoethylsulfide, preparation, properties, 126, oxidation - sulfone, 127.

$C_{10}H_{15}O_4N_2ClS$ Hydrochloride of p-nitrophenyl- β -dimethylaminoethylsulfone, preparation, properties, 127.

Group C_{11}

11. I

$C_{11}H_{18}$ 1) 6-Methyl-5-isopropyl-1,5-heptadiene-3-yne, preparation, properties, hydrogenation, cyclohydration, a-335.

2) Tert.-amylbenzene, formation, 302.

$C_{11}H_{18}$ β -Methyl-cis-octalin, synthesis, hydrogenation, 305.

$C_{11}H_{20}$ 1) β -Methyl-cis-decalin, synthesis, 303.

2) Diene hydrocarbons, preparation during the action of C_2H_5MgBr on butylidene methyl propyl ketone, 1065.

11. II

$C_{11}H_8O$ α -Naphthaldehyde, condensation with arylaminosulfone, 1371.

$C_{11}H_8O_2$ 2-Methyl-1,4-naphthoquinone, formation, 165, 180.

$C_{11}H_8O_3$ 1) Phthiocol, formation, 165, 440, oxidative-hydrolytic transformation by action of potassium permanganate in alkaline solution, 419; chlorination, 438; semicarbazone, 773; sodium salt, semicarbazone, 773; p-nitrobenzyl ether of the semicarbazone, 773.

2) 2-Methyl-1,4-naphthoquinone oxide, oxidative-hydrolytic transformations, 165.

$C_{11}H_8O_4$ 1) 2-Methyl-1,2,3,4-tetrahydronaphthalene-ol-2-trione-1,3,4, synthesis, properties, acetylation, hydrolytic transformation, quinoxaline derivatives, 453.

2) o-Pyruvil-phenyl-glyoxylic acid, formation, properties, cleavage, reaction with p-nitrophenyl hydrazine, reaction with o-phenylene diamine, 425.

3) 1,2-Naphthoquinone-4-carboxylic acid, formation, 463.

$C_{11}H_{10}O$ Methyl ether of α -naphthol, nitration, 950.

$C_{11}H_{10}O_5$ 1) o-Lactyl-phenyl-glyoxylic acid, formation, 166, 440, 448, 457, 458; properties, ester, reaction with o-phenylene diamine, reaction with alkali, 166, oxidation, 428.

2) Mixed anhydride of monophenyl malonate and acetic acid, preparation, properties, reaction with aniline, a-380.

$C_{11}H_{11}N$ 1) N-o-Tolylpyrrole, sulfonation, 491.

2) 2,4-Dimethylquinoline, synthesis, a-88.

3) o-Toluquinaldine, synthesis, 502.

4) p-Toluquinaldine, synthesis, 502.

$C_{11}H_{12}O$ Benzylidene methyl ethyl ketone, introduction of an iodoxy group, bromination, 1111, 1113.

C₁₁H₁₄O 1) Methylbenzylvinyl carbinol, synthesis, oxidation, 1288.

2) Primary isobutylphenyl ketone, formation, 120.

3) Phenylpentanone, formation, 1287.

4) Methylmesityl ketone, preparation, reduction, 672.

5) Ethyl ether of 2-allylphenol, polymerization, a-102.

C₁₁H₁₄O₂ 1) Methyl-o-tolylacetyl carbinol, synthesis, properties, phenylhydrazine, 673.

2) o-Methoxyphenylethylmethyl ketone, synthesis, properties, intensity of taste, 523.

3) p-Methoxyphenylethylmethyl ketone, synthesis, properties, intensity of taste, 522.

C₁₁H₁₄O₃ 1) Isozingerone (4-methoxy-3-hydroxyphenylethylmethyl ketone), synthesis, properties, intensity of taste, 521.

2) 4-Hydroxy-3-methoxybenzyl-ethyl ketone, synthesis, properties, taste, benzoic ether, semicarbazone, 746.

C₁₁H₁₄O₄ a-Hydroxyzingerone, synthesis, properties, nitration, intensity of taste, 521.

C₁₁H₁₆O 1) o-n-Butylanisole, formation, 667.

2) m-n-Butylanisole, formation, 666.

3) p-Tert.-butylanisole, formation, 666.

C₁₁H₁₆O₂ Tetrahydrotubanol, preparation, conversion to dihydro-osthol, a-440.

C₁₁H₁₆O 1) Diisopropylvinylethynyl carbinol, preparation, hydrogenation, dehydration, a-335.

2) 5-Propyl-1,5-octadiene-4-one, reaction with hydrogen sulfide, a-632.

3) 6-Methyl-5-isopropyl-1,5-heptadiene-4-one, preparation, properties, semicarbazone, hydrogenation, oxidation, cyclization, a-341.

4) 2,2,3-Trimethyl-1-isopropyl-Δ^{3,4}-cyclopentene-5-one, preparation, properties, hydrogenation, ozonization, oxidation, semicarbazone, 2,4-dinitrophenylhydrazine, a-339.

C₁₁H₁₆O₂ Methyl-ethyl-(1-hydroxycyclo-

pentylacetylenyl)-carbinol, preparation, catalytic hydrogenation, 1479.

C₁₁H₁₈O₄ 3,3-Dimethyl-4-isopropyl-α-δ-diketocaproic acid (second isomer), formation, properties, a-339.

C₁₁H₂₀O 1) 6-Methyl-5-isopropyl-5-heptene-4-one, preparation, properties, a-339.

2) 2,2,3-Trimethyl-1-isopropyl-cyclopentane-5-one, preparation, properties, semicarbazone, a-337.

3) β-Methyl-β-cis-decalol, synthesis, dehydration, 304.

C₁₁H₂₀O₂ 1) Methyl-ethyl-(1-hydroxycyclopentylethynyl)-carbinol, preparation, properties, 1485.

2) Tert.-methyl ether of carene glycol, preparation, properties, 886.

3) Tert. methyl ether of camphene glycol, formation, 892.

C₁₁H₂₀O₃ Ethyl ester of 1-methoxyheptene-3-carboxylic acid, preparation, properties, 1030; formation, 1031.

C₁₁H₂₀O₄ 1) Mono-sec-octyl malonate, preparation, properties, a-377.

2) Di-n-butyl malonate, formation, a-375.

3) Di-tert.-butyl malonate, formation, a-376.

C₁₁H₂₀O₁₁ Glucosido-2-arabic acid, preparation, calcium salt, a-554, a-573; methylation, a-573.

C₁₁H₂₂O 1-Ethoxynonene-3, preparation, properties, a-350.

C₁₁H₂₂O₂ 1) Methyl-ethyl-(1-hydroxycyclopentylethyl)-carbinol, preparation, properties, 1484.

2) 1-Butoxy-3-ethoxypentene-4, preparation, properties, 72.

3) 1-Butoxy-5-ethoxypentene-3, preparation, properties, 71, formation, 72.

C₁₁H₂₂O₃ Heptoxyethylidene acetate, preparation, properties, 257.

11. III

C₁₁H₇O₃Cl 2-Chloro-2-methyl-1,2,3,4-tetrahydronaphthalene-1,3,4-trione, synthesis, properties, hydration, quinoxaline derivative, semicarbazone, hydrolytic cleavage of the hydrate, 438; reaction with silver acetate, 453.

C₁₁H₉O₃N 4-Nitro-1-methoxynaphthalene,

preparation, reduction, 951.

$C_{11}H_9O_4Cl$ 1) 2-Chloro-2-methyl-1,2,3,4-tetrahydronaphthalenediol-3,3-dione-1,4, synthesis, properties, dehydration, reaction with o-phenylenediamine, reaction with semicarbazide, hydrolytic cleavage, qualitative determination of the oxidative ability of chlorine, reaction with sodium thymolate, reaction with ammonia, 438; transformation in an alkaline medium and in an atmosphere of air, 462; in a hydrogen atmosphere, 463.

2) o-(α -chloropropionyl)-phenyl-glyoxylic acid, preparation, properties, alkaline action, reaction with o-phenylenediamine, saponification, reduction, silver salt, 444; kinetics of saponification, 454; conversion in an alkaline medium and in an atmosphere of air, 462; in an atmosphere of hydrogen, 463; reaction with semicarbazide, 464.

$C_{11}H_{11}ON$ 4-Amino-1-methoxynaphthalene, preparation, hydrochloride, acetylation, action of γ -diethylaminopropylchloride, 952.

$C_{11}H_{11}O_3Cl$ Acetic ester of methyl-p-chlorobenzoyl carbinol, preparation, properties, proof of structure, 1332.

$C_{11}H_{11}O_5N$ 4-Hydroxy-3-methoxy-5-nitrostyrylmethylketone, synthesis, properties, intensity of taste, 521.

$C_{11}H_{12}NBr$ Ethylquinoline bromide, condensation with $AsBr_3$, 51.

$C_{11}H_{12}N_4S$ 4-Aminophenyl-6'-(2'-amino-4'-methylpyrimidyl)-sulfide, synthesis, properties, acetyl derivative, a-115.

$C_{11}H_{13}O_2N$ 1) 4-Amino-3-methoxystyrylmethyl ketone, preparation, properties, hydration, 744.

2) 4-Methoxy-3-Aminostyrylmethyl ketone, preparation, properties, hydration, 745.

$C_{11}H_{13}O_3N$ 5-Nitrozingerone, synthesis, properties, intensity of taste, 521.

$C_{11}H_{14}O_3N_2$ Nitrososalsolin, synthesis, properties, 1586.

$C_{11}H_{15}O_2N$ 1) 4-Amino-3-methoxyphenylethyl methyl ketone, preparation, properties, 743; taste, 741.

2) 4-Methoxy-3-aminophenyl

ethyl methyl ketone, preparation, properties, 744, taste, 741.

$C_{11}H_{20}OS$ 2-Methyl-5-propyl-6-ethyltetrahydro-1-thiopyran-4-one, synthesis, properties, a-632.

$C_{11}H_{20}O_8S_2$ γ, γ' -Di-(carboxy-propyl)-disulfone-dimethylmethane, preparation, properties, methyl ether, 841.

$C_{11}H_{21}ON$ o-Methylupinine, synthesis, properties, 131.

$C_{11}H_{25}O_6P$ Di- β -ethoxy ethyl ester of ethoxymethylphosphinic acid, preparation, properties, saponification, 925.

11. IV

$C_{11}H_{10}O_2N_4S$ 4-Nitrophenyl-6'-(2'-amino-4'-methylpyrimidyl)-sulfide, synthesis, properties, reduction, acetyl derivatives, oxidation, a-115.

$C_{11}H_{11}ONS_2$ Ethyl ester of benzothiazolyl-2-thio-glycollic acid, preparation, properties, saponification, 734, 735.

$C_{11}H_{11}O_3NS$ 1) ar-3-Nitrotetrahydronaphthalene-1-carbothiolic acid, preparation, disulfide, ethyl ester, γ -diethylaminopropyl ester, 113.

2) ar-4-Nitrotetrahydronaphthalene-1-carbothiolic acid, synthesis, disulfide, chloroethyl ester, β -diethylaminoethyl ester, 110.

3) l-o-Tolylpyrrolesulfonic-(2) acid, preparation, properties, barium salt, 491.

$C_{11}H_{13}OCl_3Hg$ Product of the action of diethylmercury with 2,4,6-trichlorophenol, 709.

$C_{11}H_{14}NIS$ 1) Methyl iodide of 2-propylbenzothiazole, synthesis, properties, 1524.

2) Ethyl iodide of 2-ethylbenzothiazole, synthesis, properties, 1524.

$C_{11}H_{15}O_2BrHg$ Product of the action of diethylmercury with bromohydroquinone, 709.

$C_{11}H_{18}O_4N_2S_2$ Di-(γ -cyano-propyl)-disulfonodimethylmethane, synthesis, properties, reaction with sulfuric acid, 841.

11. V

$C_{11}H_{10}O_2NClS$ 1) α -Naphthyl amide of

chloromethane sulfonic acid, synthesis, properties, 309.

2) β -Naphthyl amide of chloromethane sulfonic acid, synthesis, properties, 310.

Group C₁₂

12. II

C₁₂H₁₀O Methyl- α -naphthylketone, preparation, 686.

C₁₂H₁₀Hg Diphenylmercury, photoreaction, 711, 1485; reaction with aromatic ketones and aldehydes, 1131; reaction with dimethylaniline hydrochloride, 1136.

C₁₂H₁₁N Diphenylamine in system with phenyl and allyl isothiocyanates, behavior toward the mustard oils, a-275; reaction with chloroamine, 270.

C₁₂H₁₂N₂ Hydrazobenzene, azotization, 895.

C₁₂H₁₃N 1) 2-Methyl-4-ethylquinoline, synthesis, properties, salt, a-90.

2) 2,4,6-Trimethylquinoline, synthesis, a-89.

3) 2,4,8-Trimethylquinoline, synthesis, a-89.

4) 2,6,8-Trimethylquinoline, synthesis, 503.

C₁₂H₁₄O₂ 1) Dimethylphenylbutinediol, separation of the optically active isomers of the phthalate, 603, with the use of a solvent, 605; acid phthalate, 604; chinchoninate of the acid phthalate, 602.

2) Dimethylacetylenyl-phenyl-ethylene glycol, synthesis, proof of structure, action of sulfuric acid, 159.

C₁₂H₁₄O₃ 1) 4-Hydroxy-3-ethoxystyrylmethyl ketone, preparation, properties, hydration, 741.

2) Acetate of p-tolylacetylcarbinol and methyl-p-tolylcarbinol, form. 1319.

C₁₂H₁₄C₄ Isodihydrotubaic acid, preparation, hydration, methyl ester, a-440.

C₁₂H₁₆O 1) Aceto-p-cymene (2-methyl-5-isopropylacetophenone), preparation, properties, oxidation, a-559, reaction with phosphorous pentachloride, 285.

2) Isopropyl ester of 2-allylphenol, polymerization, a-102.

C₁₂H₁₆O₃ 4-Hydroxy-3-ethoxyphenylethylmethyl ketone, preparation, properties, 741.

C₁₂H₁₆O₄ Tetrahydrotubaic acid, preparation, properties, decarboxylation, a-440.

C₁₂H₁₆O₆ Arbutin, cleavage by means of sodium in liquid ammonia, 1099.

C₁₂H₁₈O₃ Ethyl ester of 1-methoxy-3-one-7-carboxylic acid, formation, 1030.

C₁₂H₁₈S Diene, product of dehydration of 2-methyl-4-vinylhexahydrothiochroman-4-ol, preparation, properties, condensation with maleic anhydride, a-646.

C₁₂H₁₉N m-Xylyldiethylamine, preparation, picrate, 226.

C₁₂H₂₀O₂ Optical activity of bornyl acetate, separation of racemic isomer of dimethylphenylbutinediol, 605.

C₁₂H₂₀O₈ Glucosido-3-glucal, preparation, bromination, oxidation, a-571.

C₁₂H₂₀O₁₀ Lactone of glucosido-3-(2-desoxy)-glyconic acid (glucosido-3-glucosaccharinic acid), preparation, a-555, a-557.

C₁₂H₂₂O 2,2,5,6-Pentamethylheptene-4-one-3, bromination, introduction of an iodoxy group, Grignard reaction, 1111.

C₁₂H₂₂O₂ 1) 2-Methoxy-5-isopropyl-6-methyl-5-heptene-4-one, preparation, properties, splitting off of methanol, a-340.

2) Methyl acetal of camphenilane aldehyde, formation, 891.

3) Tert. ethyl ester of carene glycol, preparation, properties, 887, 891.

C₁₂H₂₂O₃ 1) 1-Methoxydecene-3-carboxylic acid-6, formation, 1034; ethyl ester, 1033.

2) Ethyl ester of 1-methoxyoctene-3-carboxylic acid-6, preparation, properties, 1031, formation, 1032.

C₁₂H₂₂O₁₀ Glucosido-3-(2-desoxy)-glucose, preparation, phenylhydrazones, acetyl derivatives, oxidation, a-555.

C₁₂H₂₂O₁₁ 1) α -(1,5)-glucosido-3-(1,5)-glucose, proof of structure, a-571.

2) Glucosido-3-glucosaccharinic acid (glucosido-3)-2-desoxy-(glyconic acid), preparation, calcium and barium salt to lactone, phenylhydrazide, methylation, a-555 and a-557.

C₁₁H₂₄O₂ 1-Butoxy-5-propoxypentene-3, preparation, properties, 70.

$C_{12}H_{26}O_3$ Diisooamyl ether of dimethylene glycol, preparation, properties, 1480.

12. III

$C_{12}H_7NCl_4$ 2,4,2',4'-Tetrachlorodiphenylamine, formation, 274.

$C_{12}H_9NCl_2$ 4,4-Dichlorodiphenylamine, formation, 274.

$C_{12}H_{10}O_3S$ 4-Hydroxydiphenylsulfone, preparation, properties, dibromo derivative, o-methyl derivative, acetyl derivative, a-415.

$C_{12}H_{10}O_4S$ 4,4'-Dihydroxydiphenylsulfone, nitrosation, a-420.

$C_{12}H_{10}ClAs$ Diphenylchlorarsine, cleavage of the oxychlorides of isovaleric, butyric, isobutyric, and propionic acids in the presence of aluminum chloride, 121.

$C_{12}H_{11}O_3N$ 1) 2-Benzylidene-3-acetyl-oxazolone-5, preparation, properties, cleavage, 752.

2) Semicarbazone of phthiocol, preparation, sodium salt, p-nitrobenzyl ether, 773.

$C_{12}H_{11}NS$ N-Phenyl-o-aminophenylmercaptan, synthesis, 1534.

$C_{12}H_{15}OCl$ 1) Chloraceto-p-cymene, preparation, properties, a-562.

2) 2-Methyl-5-chloroisopropylacetophenone, formation, proof of structure, 285.

$C_{12}H_{15}O_4N$ Cotarnine, condensation with arylaminosulfone, 1371.

$C_{12}H_{15}NS$ 2-Amylbenzothiazole, synthesis of the quaternary salts, 1524.

$C_{12}H_{16}O_3N_2$ Nitrososalsolidine, synthesis, properties, 1586.

$C_{12}H_{17}O_2N$ Salsolidine, N-derivatives, 1583.

$C_{12}H_{18}OS$ 2-Methyl-4-ethynylhexahydrothiochroman-4-ol (isomer), preparation, properties, hydration, a-643.

$C_{12}H_{20}ON_2$ Isoammodendrine, separation, properties, salt saponification, 1401.

$C_{12}H_{20}OS$ 2-Methyl-4-vinylhexahydrothiochroman-4-ol (isomer), preparation, properties, dehydration, a-644.

$C_{12}H_{20}O_4S_2$ 1,2-Cyclobutylenedimethylene-disulfone-pentamethylenemethane, preparation, properties, 842.

$C_{12}H_{20}N_2S$ p-Aminophenyl-β-diethyl-

aminoethylsulfide, synthesis, dihydrochloride, 126.

$C_{12}H_{22}OS$ 2-Methyl-4-ethylhexahydrothiochroman-4-ol (isomer), preparation, properties, sulfone, a-645.

$C_{12}H_{22}O_3S$ Sulfone of 2-methyl-4-ethylhexahydrothiochroman-4-ol (isomer), preparation, properties, a-645.

$C_{12}H_{23}ON$ O-Ethyllupinine, synthesis, properties, 132.

$C_{12}H_{24}O_2Br_2$ Dibromide of the dibutyl ether of erythroglycol, 1052.

$C_{12}H_{27}O_6P$ 1) Di-β-ethoxyethyl ester of propoxymethylphosphinic acid, preparation, properties, saponification, 925.

2) Di-β-ethoxyethyl ester of β-ethoxyethylphosphinic acid, preparation, properties, saponification, 924.

3) Tri-β-ethoxyethyl ester of phosphorous acid, preparation, properties, cuprous iodide, isomerization upon action of haloido-substituted ethers, 923.

12. IV

$C_{12}H_8N_4O_8S_2$ 2,4,2',4'-Tetranitrodiphenyl-disulfide, preparation, 1509.

$C_{12}H_7N_3O_6S_2$ 2,2',4'-Trinitrodiphenyl-disulfide, preparation, 1509.

$C_{12}H_8O_4N_2S_2$ 2,2'-Dinitrodiphenyldisulfide, preparation, 1509, action of sodium sulfide and disulfide, 1509.

$C_{12}H_8O_4N_2S_3$ 2,2'-Dinitrodiphenyltrisulfide, preparation, properties, reaction, 1503.

$C_{12}H_9O_3ClS$ 4-Hydroxy-4'-chlorodiphenylsulfone, preparation, properties, a-418.

$C_{12}H_{12}O_2N_2S$ 4,4'-Diaminodiphenylsulfone, condensation with aldehyde, 1371.

$C_{12}H_{14}O_8S_2Ba$ Barium salt of sulfo acid of 2,5-dimethylfuran, see $C_8H_8O_4S$.

$C_{12}H_{16}NIS$ Ethyl iodide of 2-propylbenzothiazole, synthesis, properties, 1524.

$C_{12}H_{18}O_2N_2S$ p-Nitrophenyl-β-diethylaminoethyl sulfide, synthesis, hydrochloride reduction, 126.

$C_{12}H_{18}O_4N_2S$ p-Nitrophenyl-β-diethylaminoethyl sulfone, preparation, properties, hydrochloride, 127, reduction, 128.

$C_{12}H_{20}O_2N_2S$ p-Aminophenyl- β -diethylaminoethyl sulfone, preparation, properties, 128.

$C_{12}H_{22}N_2Cl_2S$ Dihydrochloride of p-aminophenyl- β -diethylaminoethyl sulfide, preparation, properties, 126.

12. V

$C_{12}H_{12}O_2NCIS$ 1) α -Naphthylamide of α -chloroethane sulfonic acid, synthesis, properties, 310.

2) β -Naphthylamide of α -chloroethane sulfonic acid, synthesis, properties, 310.

$C_{12}H_{13}O_6N_2SAs$ Aminobenzene-sulfanilamidohydroxyarsinic acid, synthesis, therapeutic activity, 311.

$C_{12}H_{19}O_2N_2ClS$ Hydrochloride of p-nitrophenyl- β -diethylaminoethyl sulfide, preparation, properties, 126, oxidation of sulfone, 127.

$C_{12}H_{19}O_4N_2ClS$ Hydrochloride of p-nitrophenyl- β -diethylaminoethyl sulfone, preparation, properties, 127.

12. VI

$C_{12}H_{12}O_4N_2ClSAs$ Sulfanilamido-hydroxyphenylarsenoxide, synthesis, properties, chemico-therapeutic activity, 312.

Group C_{13}

13. I

$C_{13}H_{14}$ β -Propyl naphthalene, formation, properties, a-164.

$C_{13}H_{16}$ 3-Methyl-5-phenylhexadiene-3,4, formation, properties, oxidation, 1296.

$C_{13}H_{22}$ β -Allyldecalins, stereoisomeric, irreversible catalysis, a-162.

$C_{13}H_{24}$ 1) 2-Tert.-butyl-4,5,5-trimethylhexadiene-1,3, preparation, properties, bromination, introduction of iodoxy group, 1064.

2) β -Propyl decalins, stereoisomeric, preparation, properties, dehydration, a-162.

13. II

$C_{13}H_8O$ Fluorenone, reaction with diphenyl mercury, 1133.

$C_{13}H_{10}O$ Benzophenone, preparation, 684; reaction with diphenyl mercury, 1133.

$C_{13}H_{10}O_5$ Acetate of 2-methyl-1,2,3,4-tetrahydronaphthalene-2-thione-1,3,4, synthesis, properties, saponification, hydrolytic cleavage, reaction of alkali, quinoxaline derivative, 453.

$C_{13}H_{10}N_2$ 9-Aminoacridine, rate of hydrolysis of amino groups, 513.

$C_{13}H_{12}O$ Benzohydrol, condensation with 2-nitroindanedione-1,3, 1543.

$C_{13}H_{12}O_2$ 1) 2,4-Dihydroxydiphenyl methane, preparation, action of alkali, 689.

2) 2,6-Dihydroxydiphenyl methane, formation, 690.

3) 3,4-Dihydroxydiphenyl methane, preparation, properties, 691.

$C_{13}H_{12}Hg$ Benzylphenyl mercury, photoreactions, 1490.

$C_{13}H_{14}N_2$ Benzalmethylphenyl hydrazone, azotization, 895.

$C_{13}H_{16}O_3$ 4-Hydroxy-3-propoxystyryl methyl ketone, preparation, properties, hydrogenation, 742.

$C_{13}H_{18}O_2$ Methylmesitylacetyl carbinol, synthesis, properties, phenyl hydrazone, 672.

$C_{13}H_{18}O_3$ 1) 4-Hydroxy-3-methoxy phenyl isoamyl ketone, preparation, properties, 746, taste, 741.

2) 4-Hydroxy-3-propoxy phenyl ethyl methyl ketone, preparation, properties, 742, taste, 741.

3) Guaiacyl isocaproate, synthesis, properties, isomerization, 746.

$C_{13}H_{18}O_4$ Product of addition of maleic anhydride to 1-butoxy-2,4-pentadiene, 72.

$C_{13}H_{22}O_4$ Ethyl ester of 3-methyl-8-methoxy-octene-5-one-2-carboxylic acid-3, preparation, 1030, cleavage, 1031.

$C_{13}H_{24}O_2$ 1) 3-Methyl-8-methoxyoctene-5-one-2, preparation, properties, 1033.

2) Tert.-propyl ether of carene glycol, preparation, properties, 887.

3) Tert.-isopropyl ether of carene glycol, preparation, properties, 888.

$C_{13}H_{24}O_3$ Ethyl ester of 1-methoxynonene-3-carboxylic acid-6, preparation,

properties, 1032.

$C_{13}H_{26}O$ 1-Butoxynone-3, preparation, properties, a-350.

$C_{13}H_{26}O_2$ 1,5-Dibutoxy-3-pentene, formation, 72.

13. III

$C_{13}H_9NS$ 2-Phenylbenzothiazole, synthesis of quaternary salts, 1525.

$C_{13}H_9N_2Cl$ 1) 2-Phenyl-5-chlorobenzimidazole, preparation, properties, 1561.

2) Isomers of chloroamino acid, rate of hydrolysis of amino groups, 512.

$C_{13}H_{10}O_2Hg$ Product of reaction of diphenyl mercury with salicylic aldehyde, 1132.

$C_{13}H_{10}O_3N_2$ N-Nicotinyl-p-aminobenzoid acid, synthesis, 317.

$C_{13}H_{11}O_2N$ Diphenylamino-2-carboxylic acid, acid chloride, anhydride, a-189.

$C_{13}H_{11}O_2N_3$ 1) 3-Nitrobenzalphenyl hydrazone, azotization, 895.

2) 4-Nitrobenzalphenyl hydrazone, azotization, 895.

$C_{13}H_{12}ON_2$ 1) Formyldiphenyl hydrazine, azotization, 895.

2) β -Benzoylphenyl hydrazide, azotization, 895.

$C_{13}H_{12}O_3S$ 1) 2-Hydroxy-5-methyldiphenyl sulfone, preparation, properties, a-416.

2) 4-Hydroxy-6-methyldiphenyl sulfone, preparation, properties, derivatives, a-417.

3) 4-Hydroxy-5-methyldiphenyl sulfone, preparation, properties, o-methyl-, acetyl-, nitro-, bromo derivatives, a-416; nitrosation, a-419.

$C_{13}H_{13}ON_3$ Carbanilphenyl hydrazide, azotization, 895.

$C_{13}H_{13}NS$ N-Benzyl-o-aminophenyl mercaptan, synthesis, properties, 1534; condensation with acid chlorides, 1521.

$C_{13}H_{14}ON_2$ N'-Benzoyl-N-methyl-N-phenyl hydrazine, azotization, 895.

$C_{13}H_{15}NS$ Cyclohexylbenzothiazolyl-2-sulfide, preparation, properties, oxidation, 731.

$C_{13}H_{16}NBr$ Bromate of N-butylquinoline, condensation with $AsBr_3$, 50.

$C_{13}H_{17}ON_3$ Pyramidon, (Di-methylamino-antipyrine), coordination compounds

with bivalent metals, 1231.

$C_{13}H_{20}ON_2$ Conolline, isolation, properties, salts, 1402.

$C_{13}H_{22}N_2S$ p-Aminophenyl- γ -diethylaminopropyl sulfide, synthesis, dihydrochloride, 127.

$C_{13}H_{25}ON$ o-Propyllupinin, synthesis, properties, 132.

13. IV

$C_{13}H_9OBr_3Hg$ p-Tolylmercuro-2,4,6-tribromophenol, preparation, a-577.

$C_{13}H_9O_7N_3Hg$ o-Tolylmercuro-2,4,6-trinitro-1-hydroxybenzene, preparation, a-578.

$C_{13}H_9O_7N_3Hg$ p-Tolylmercuro-2,4,6-trinitrophenol, preparation, a-578.

$C_{13}H_{10}ONCl$ Acid chloride of diphenylamino-2-carboxylic acid, reaction with pyridine, a-195.

$C_{13}H_{10}O_2NCl$ 5-Chlorodiphenylamino-2-carboxylic acid, acid chloride, anhydride, a-189.

$C_{13}H_{11}OBrHg$ p-Tolylmercuro-4-bromo-1-hydroxybenzene, a-577.

$C_{13}H_{11}O_3NHg$ p-Tolylmercuro-2-nitro-1-hydroxybenzene, preparation, a-576.

$C_{13}H_{11}O_3ClS$ 4-Hydroxy-5-methyl-4'-chlorodiphenyl sulfone, preparation, properties, nitro derivative, a-419.

$C_{13}H_{12}O_5N_4S$ 4-Nitrophenyl-6'-(2'-acetylamino-4'-methylpyrimidyl)-sulfone, preparation, reduction, a-117.

$C_{13}H_{14}O_3N_4S$ 4-Aminophenyl-6'-(2'-acetylamino-4'-methylpyrimidyl)-sulfone, preparation, properties, a-118.

$C_{13}H_{15}O_2NS$ Cyclohexylbenzothiazolyl-2-sulfone, preparation, properties, 731.

$C_{13}H_{15}O_3NS$ Ethyl ester of ar-3-nitrotetrahydronaphthalene-1-carbothioic acid, preparation, properties, 113.

$C_{13}H_{18}NIS$ Methyl iodide of 2-amybenzothiazole, synthesis, properties, 1524.

$C_{13}H_{20}O_2N_2S$ p-Nitrophenyl- γ -diethylaminopropyl sulfide, synthesis, 126; hydrochloride, 127; oxidation to sulfone, 128.

$C_{13}H_{20}O_4N_2S$ p-Nitrophenyl- γ -diethyl-

aminopropyl sulfone, preparation, properties, hydrochloride, 128, reduction, 129.

C₁₃H₂₂O₂N₂S p-Aminophenyl-γ-diethylaminopropyl sulfone, preparation, properties, 129.

C₁₃H₂₄N₂Cl₂S Dihydrochloride of p-aminophenyl-γ-diethylaminopropyl sulfide, preparation, properties, 127.

13. V

C₁₃H₁₄O₃NC1S β-Chloroethyl ester of α-4-nitrotetrahydro-1-naphthalene carbothiolic acid, preparation, properties, 110.

C₁₃H₂₁O₂N₂ClS Hydrochloride of p-nitrophenyl-γ-diethylaminopropyl sulfide, preparation, properties, 126.

C₁₃H₂₁O₄N₂ClS Hydrochloride of p-nitrophenyl-γ-diethylaminopropyl sulfone, preparation, 128.

Group C₁₄

14. I

C₁₄H₁₈ Di-Δ'-cyclohexenylacetylene, preparation, hydration, cyclohydration, a-226.

C₁₄H₂₂ p-Di-sec.-butylbenzene, formation, 301.

C₁₄H₂₄ β-Decalylbutene, stereoisomeric, irreversible catalysis, a-162.

C₁₄H₂₈ β-Butyl decalins, stereoisomeric, preparation, properties, a-163.

14. II

C₁₄H₁₁Cl 1,1-Diphenyl-2-chloroethylene, formation, reaction with benzene, 657.

C₁₄H₁₂O 1) Phenyl-p-tolyl ketone, preparation, 684.

2) o-Methylbenzophenone, preparation, 682.

C₁₄H₁₂O₂ Benzylbenzoate, formation from benzyl alcohol, a-149.

C₁₄H₁₂O₃ 1) 2-Phenylphenoxyacetic acid, preparation, properties, amide, anilide, 1148.

2) 4-Phenylphenoxyacetic acid, amide, analide, 1145.

C₁₄H₁₂N₂ 2-Phenyl-5-methoxybenzimidazole, synthesis, properties, hydrochloride, 1560.

C₁₄H₁₄O₂ Methyl-α-naphthylacetyl carbinol, synthesis, properties, monohydrate, 674.

C₁₄H₁₄Hg 1) Dibenzyl mercury, photoreactions, 1489.

2) o-Tolyl mercury, nitration, 236; reaction with phenols, a-575.

3) p-Tolyl mercury, nitration, 234; reaction with phenols, a-575.

C₁₄H₁₅N Dibenzylamine, reaction with chloramine, 275, formation, 275.

C₁₄H₁₈O₂ p-Hydroxystyrylisoamyl ketone, synthesis, hydrogenation, 522.

C₁₄H₂₀O 1) 2-Butyro-p-cymene, preparation, properties, oxidation, reduction, a-561.

2) 2-Isobutyro-p-cymene, preparation, properties, oxidation, reduction, a-561.

3) 1,2-Di-(Δ'-cyclohexenyl)-ethanone, preparation, properties, semicarbazone, hydrogenation, cyclization, a-227.

4) 1,1-Spirocyclohexane-Δ⁸,⁹-tetrahydroindan-3-one, formation, a-228.

C₁₄H₂₀O₂ 1) Methyl-(3-methyl-6-isopropylphenyl)-acetyl carbinol, synthesis, properties, 673.

2) p-Hydroxyphenylethylisoamyl ketone, synthesis, properties, intensity of burning taste, p-nitrophenyl hydrazone, 522.

C₁₄H₂₀N₂ m-Phenylene-di-N,N'-pyrrolidyl, synthesis, properties, a-170.

C₁₄H₂₄O Cyclohexylhexahydrobenzyl ketone, preparation, condensation with vinylacetylene, a-228.

C₁₄H₂₄O₄ Ethyl ester of 3-ethyl-8-methoxyoctene-5-one-2-carboxylic acid-3, preparation, properties, cleavage, 1031.

C₁₄H₂₆O₂ 1) 1-Ethoxy-6-β-ethoxyethyl-octadiene, formation, properties, oxidation, a-352.

2) Tert.-N.-butyl ether of carene glycol, preparation, properties, 888.

C₁₄H₂₆O₃ Ethyl ester of 1-methoxydecene-3-carboxylic acid-6, preparation, properties, 1033; oxidation, 1034.

C₁₄H₂₈O₂ Ethyl ester of ethyloctylacetic acid, formation, 1034.

14. III

C₁₄H₈O₄Hg Anthraquinonyl-1,5-mercury hydroxide, preparation, reaction with

sulfuric acid, 727.

$C_{14}H_8O_4Hg_2$ Anthraquinonyl-1,8-mercury hydroxide, preparation, properties, reaction with sulfuric acid, 852.

$C_{14}H_8O_6S_2$ 1) 1,4-Anthraquinone disulfonic acid, preparation, properties, 720.
2) 1,5-Anthraquinone disulfonic acid, preparation, properties, hydrate, salts, 718.
3) 1,8-Anthraquinone disulfonic acid, preparation, properties, 720.

$C_{14}H_8O_2N$ Phthalanil, condensation with chloral, 643.

$C_{14}H_8O_3Cl_3$ 2-(4'-Chlorophenyl)-4,6-dichlorophenoxyacetic acid, preparation, properties, amide, anilide, 1150.

$C_{14}H_8O_3Br_3$ 1) 2-(4'-Bromophenyl)-4,6-dibromophenoxyacetic acid, preparation, properties, amide, anilide, 1151.
2) 4-(4'-Bromophenyl)-2,6-dibromophenoxyacetic acid, preparation, properties, amide, anilide, 1148.

$C_{14}H_{10}O_2N_2$ N-Phenylaminophthalimide, azotization, 895.

$C_{14}H_{10}O_3Cl_2$ 1) 2-Phenyl-4,6-dichlorophenoxyacetic acid, preparation, properties, amide, anilide, 1150.
2) 4-Phenyl-2,6-dichlorophenoxyacetic acid, preparation, properties, amide, 1147.

$C_{14}H_{10}O_3Br_2$ 4-Phenyl-2,6-dibromophenoxyacetic acid, preparation, properties, amide, anilide, 1147.

$C_{14}H_{11}O_3Cl$ 1) 2-Phenyl-4-chlorophenoxyacetic acid, preparation, properties, amide, anilide, 1149.
2) 2-Phenyl-6-chlorophenoxyacetic acid, preparation, properties, amide, anilide, 1149.
3) 4-Phenyl-2-chlorophenoxyacetic acid, preparation, properties, amide, anilide, 1146.

$C_{14}H_{11}O_3Br$ 1) 4-Phenyl-2-bromophenoxyacetic acid, preparation, properties, amide, anilide, 1146.
2) 2-Phenyl-4-bromophenoxyacetic acid, preparation, amide, anilide, 1150.

$C_{14}H_{11}NS$ 2-Benzylbenzothiazole, synthesis of quaternary salts, 1525.

$C_{14}H_{11}NS_2$ Benzylbenzothiazole-2-sulfide, preparation, properties, oxidation, 731.

$C_{14}H_{12}ON_2$ 1) 2-Phenyl-5-methoxybenzimidazole, synthesis, properties, hydrochloride, 1560.
2) 2-Methoxy-6-chloro-9-aminoacrylide, hydrolytic cleavage of amino group, 513.

$C_{14}H_{12}OHg$ Product of reaction of acetophenone and diphenyl mercury, 1132.

$C_{14}H_{13}O_2N$ 1) Benzohydrilnitromethane, formation, 1548.
2) Amide of 2-phenylphenoxyacetic acid, preparation, properties, 1149.
3) 4-Phenylphenoxyacetamide, preparation, properties, 1145.

$C_{14}H_{14}ON_2$ 1) β -Acetylhydrobenzene, azotization, 895.
2) N'-Acetyl-N,N-diphenylhydrazine, azotization, 895.

$C_{14}H_{17}O_5Cl$ 4-Carbethoxy- ω -chlorozingerone, synthesis, saponification, 520.

$C_{14}H_{16}NS$ 2-Heptylbenzothiazole, synthesis of quaternary salt, 1524.

$C_{14}H_{21}O_3N$ N- β -Hydroxyethyl salsolidine, synthesis, properties, hydrochloride, phenylurethane, benzoyl derivative, 1585.

$C_{14}H_{27}ON$ O-Butyl lupinine, synthesis, properties, 133.

14.IV

$C_{14}H_8O_2Cl_2Hg_2$ 1) 1,5-Anthraquinonyl mercury chloride, preparation, derivatives, 726; reaction with oleum, 727.
2) Chloride of 1,8-anthraquinonyl mercury, preparation, properties, action of alkali, sulfonation, 851.

$C_{14}H_8O_2NCl$ 1-Amino-4-chloroanthraquinone, synthesis, benzoylation products, 756.

$C_{14}H_8O_2NBr$ 1-Amino-4-bromoanthraquinone, synthesis, benzoylation products, 756.

$C_{14}H_8O_6N_2S_2$ p,p-Dinitrodibenzoyldisulfide, synthesis, 1188.

$C_{14}H_8O_{10}S_2Hg_2$ 1) 1,5-Anthraquinonyl mercury, sulfate, preparation, sulfonation, 727.
2) 1,8-Anthraquinonyl mercury sulfate, preparation, properties, sulfonation, 852.

$C_{14}H_8O_3ClBr_2$ 4-(4'-Bromophenyl)-2-chloro-

- 6-bromophenoxyacetic acid, preparation, properties, amide, anilide, 1147.
- $C_{14}H_{10}O_2NCl$ 2-(4'-Chlorophenyl)-4,6-dichlorophenoxyacetamide, preparation, properties, 1151.
- $C_{14}H_{10}O_2NBr_3$ 1) Amide of 4-(4'-Bromophenyl)-2,6-dibromophenoxyacetic acid, preparation, properties, 1148.
2) Amide of 2-(4'-bromophenyl)-2,6-dibromophenoxyacetic acid, preparation, properties, 1151.
- $C_{14}H_{11}O_2NCl_2$ 1) Amide of 2-Phenyl-4,6-dichlorophenoxyacetic acid, preparation, properties, 1150.
2) Amide of 4-phenyl-2,6-dichlorophenoxyacetic acid, preparation, properties, 1147.
- $C_{14}H_{11}O_2NBr_2$ 4-Phenyl-2,6-dibromophenoxyacetamide, preparation, properties, 1147.
- $C_{14}H_{11}O_2NS$ Benzylbenzothiazole-2-sulfone, preparation, properties, 731.
- $C_{14}H_{11}O_3NS$ Benzyl ester of p-nitrothiobenzoic acid, synthesis, properties, 1188.
- $C_{14}H_{12}O_2NCl$ 1) 2-Phenyl-4-chlorophenoxyacetamide, preparation, properties, 1149.
2) 4-Phenyl-2-chlorophenoxyacetamide, preparation, properties, 1146.
3) 2-Phenyl-6-chlorophenoxyacetamide, preparation, properties, 1149.
- $C_{14}H_{12}O_2NBr$ 1) Amide of 2-Phenyl-4-bromophenoxyacetic acid, preparation, properties, 1150.
2) Amide of 4-phenyl-2-bromophenoxyacetic acid, preparation, properties, 1146.
- $C_{14}H_{12}O_3NCl$ 4'-Methoxy-5-chlorodiphenylamino-2-carboxylic acid, acid chloride, anhydride, a-189, a-191.
- $C_{14}H_{12}NIS$ Methyl iodide of 2-phenylbenzothiazole, synthesis, properties, 1522.
- $C_{14}H_{13}O_2N_2Cl_3$ 1) $\alpha, \alpha, 2, 2'$ -(Dioxy-5,5'-diaminodiphenyl)- β, β, β' -trichloroethane, preparation, properties, hydrochloride, a-569.
2) $\alpha, \alpha, (3,3'$ -Diamino-4,4'-dioxydiphenyl)- β, β, β' -trichloroethane, preparation, properties, acetyl derivative, a-568.

$C_{14}H_{14}O_5ClP$ Di-(o-methoxy)-phenyl ester of phosphoroso-monochloride, preparation, properties, 116.

$C_{14}H_{18}ONBr$ β -[N-Benzoylpiperidyl-(4)]-ethyl bromide, preparation, hydrobromide, action of alkali on hydrobromide, 1380.

14. V

$C_{14}H_8O_2N_4Cl_6Hg_2$ Double salt of 1,5-antraquinonyl-bis-diazonium chloride and mercuric chloride, preparation, decomposition, 725.

$C_{14}H_7O_6ClSHg_2$ 1,5-Antraquinonyl mercury chloride sulfate, preparation, 728.

$C_{14}H_{10}O_2NClBr_2$ 4-(4'-Bromophenyl)-2-chloro-6-bromophenoxy acetamide, preparation, properties, 1148.

$C_{14}H_{35}O_7N_2SAs$ Aceto-sulfanilamido-hydroxy-phenyl arsenic acid, synthesis, saponification, therapeutic activity, 315.

Group C₁₅

15. I

$C_{15}H_{12}$ 2-Methylphenanthrene, formation, 291.

$C_{15}H_{14}$ 1,2-Diphenylpropene-1, action of sulfur, a-405.

$C_{15}H_{24}$ 1) Ledene, preparation, properties, dehydration, action of formic acid, a-601.
2) Leddiene, preparation, properties, dehydration, a-600.

15. II

$C_{15}H_{10}S_3$ 4,5-Diphenyl-1,2-dithiol-3-thione, preparation, properties, a-405.

$C_{15}H_{12}O$ 1) Benzalacetophenone, reaction with diphenyl mercury, 1132.

2) 3-Hydroxy-7-methylphenanthrene, formation, picrate, reduction, 292.

$C_{15}H_{14}N_2$ 1) 2-Benzyl-5-methylbenzimidazole, synthesis, properties, hydrochloride, 1559.

2) 2-(β -Phenylethyl)-benzimidazole, synthesis, properties, hydrochloride, 1558.

$C_{15}H_{16}O$ 3-Keto-7-methyl-1,2,3,9,10,11-

hexahydrophenanthrene, synthesis, 290; properties, oxime, dehydrogenation, 291.

C₁₅H₂₂O 1) 1-Butoxy-5-phenylpentene-3, preparation, properties, a-351.

2) 2-Isovaleryl-p-cymene, preparation, properties, oxime, reduction, a-562; reaction with phosphorus pentachloride, 285.

C₁₅H₂₆O Ledol, separation, structure, a-597.

C₁₅H₂₆O₄ Ethyl ester of 3-propyl-8-methoxyoctene-5-one-2-carboxylic acid-3, preparation, properties, 1032.

C₁₅H₂₈O₄ Monolaurinyl malonate, preparation, properties, a-377.

15. III

C₁₅H₁₃NS β-Phenylethylbenzothiazolyl-2-sulfide, preparation, properties, oxidation, 731.

C₁₅H₁₄ON₂ 1) 2-Benzyl-5-methoxybenzimidazole, synthesis, properties, hydrochloride, 1561.

2) 2-Phenyl-5-methoxybenzimidazole, synthesis, properties, hydrochloride, 1560.

C₁₅H₁₄O₂N₂ Dianilide of malonic acid, preparation, properties, a-378.

C₁₅H₁₆ON₂ N'-Acetyl-N-benzyl-N-phenylhydrazine, azotization, 895.

C₁₅H₁₆O₂N₂ Carbethoxydiphenyl hydrazine, azotization, 895.

C₁₅H₁₈O₂Cl α-(3-Chlorocrotyl)-γ-(m-tolyl)-butyric acid, preparation, reaction with sulfuric acid, 291.

C₁₅H₁₈O₃N β-(N-Benzoylpiperidyl-(4))-propionic acid, synthesis, action of bromine on silver salt, 1380.

C₁₅H₂₀ON₂ Leontidine, isolation, properties, picrate, iodomethylate, hydrochloride, a-430.

C₁₅H₂₁OCl Chloroisobutyl cymyl ketone, formation, 287.

C₁₅H₂₃O₄N Salsolidine propanediol, synthesis, properties, hydrochloride, 1586.

C₁₅H₂₄ON₂ Leontine, isolation, properties, derivatives, a-432.

C₁₅H₂₅O₄N Supinine, isolation, purification, saponification, structure, 1384.

15. IV

C₁₅H₁₃O₂NS β-Phenylethylbenzothiazolyl-2-sulfone, preparation, properties, 731.

C₁₅H₁₄NIS 1) Methyl iodide of 2-benzylbenzothiazole, synthesis, 1525.

2) Benzyl iodide of 2-methylbenzothiazole, synthesis, properties, 1523.

C₁₅H₁₈O₂N₂S 1) 3-(p-Toluenesulfamino)-N,N-dimethylaniline, preparation, a-680.

2) 4-(p-Toluenesulfamino)-N,N-dimethylaniline, preparation, properties, reaction with methyl ether of p-toluenesulfonate, iodomethylate, reaction with silver oxide, a-685.

C₁₅H₂₂NIS Methyl iodide of 2-heptylbenzothiazole, synthesis, properties, 1524.

Group C₁₆

16. I

C₁₆H₁₆ α,α-Di-o-tolylethylene, formation, 686.

C₁₆H₂₆ 1) Diamylbenzene, formation, 301.

2) Di-tert.-amylbenzene, formation, 302.

16. II

C₁₆H₁₄O₂ Diphenylbutenediol, separation into optically activated isomers, 602; diphthalate ester, 603; acid phthalate, 601; chinchoninate of phthalate ester, 602; optically active phthalate ester, 603.

C₁₆H₁₈O Phenylmesityl ketone, preparation, reduction, 682.

C₁₆H₁₈N₂ 2-(β-Phenylethyl)-5-methylbenzimidazole, synthesis, properties, hydrochloride, 1559.

C₁₆H₁₈ α-Methyl-α-phenyl-β-benzyl-ethylene glycol, preparation, oxidation, a-550.

C₁₆H₂₂O₂ Tricyclic diketone, produced by action of 1,3-dimethyl-1-cyclopentene-4,5-dione with 2,2-dimethyl-4-vinyl-3,6-dihydropyran, properties, hydrogenation, a-221.

C₁₆H₂₂O₄ (m-Tolyl)-ethylmalonate, ester, synthesis, reaction with 1,3-dichlorobutene-2, 290.

C₁₆H₂₂O₈ Coniferin, cleavage by sodium in liquid ammonia, 1099.

$C_{16}H_{24}O_2$ Tricyclic ketone, preparation by action of 1,3-dimethyl-1-cyclopentene-5-one on 2,2-dimethyl-4-vinyl-3,6-dihydropyran, properties, hydrogenation, semicarbazone, oxime, a-219.

$C_{16}H_{24}O_3$ 1) Isoamylzingerone (4-isoamylhydroxy-3-methoxyphenylethyl methyl ketone), preparation, properties, 743.

2) Tricyclic diketone, preparation by hydrogenation of diketone $C_{16}H_{22}O_3$, properties, a-221.

$C_{16}H_{26}O_2$ Tricyclic ketone, preparation by hydrogenation of tricyclic ketone $C_{16}H_{24}O_2$, properties, semicarbazone, reduction, a-219.

$C_{16}H_{26}O_2$ Tricyclic alcohol from ketone $C_{16}H_{26}O_2$, properties, dinitrobenzoate, a-220.

$C_{16}H_{28}O_4$ Ethyl ester of 3-butyl-8-methoxyoctene-5-one-2-carboxylic acid-3, preparation, properties, cleavage, oxidation, 1032.

$C_{16}H_{32}O_2$ Palmitic acid, amidation, a-680; bismuth salt, preparation, properties, 1103; antimony salt, preparation, properties, 1105.

16. III

$C_{16}H_{10}N_2S_2$ bis-(Benzothiazolyl)-1,2-ethylene, synthesis of quaternary salt, 1526.

$C_{16}H_{11}N_3O_4$ Product of reaction of o-pyrrolylphenylglyoxylic acid with p-nitrophenylhydrazine, 426.

$C_{16}H_{12}N_2S_2$ bis-(Benzothiazolyl)-ethane, synthesis of quaternary salt, 1525.

$C_{16}H_{13}O_3Cl$ Benzoic ester of methyl-p-chlorobenzoyl carbinol, preparation, properties, 1332.

$C_{16}H_{14}OHg$ Product of reaction of benzalacetone and diphenyl mercury, 1132.

$C_{16}H_{16}ON_2$ 1) 2-Benzyl-5-ethoxybenzimidazole, synthesis, properties, hydrochloride, 1560.

2) 2-(β -Phenylethyl)-5-methoxybenzimidazole, synthesis, properties, hydrochloride, 1561.

$C_{16}H_{19}O_4Cl$ β -(m-Tolyl)-ethyl- γ -chlorocrotyl malonic acid, synthesis, decarboxylation, 291.

$C_{16}H_{20}O_3S$ Anhydride, product of condensation of maleic anhydride with the

diene $C_{12}H_{18}S$, preparation, saponification, a-646.

$C_{16}H_{22}O_4S$ Acid, product of saponification of $C_{16}H_{20}O_3S$, a-646.

$C_{16}H_{23}ON$ O-Phenyllupinine, synthesis, properties, picrate, iodomethylate, 131.

$C_{16}H_{23}NS$ 2-Nonylbenzothiazole, synthesis, quaternary salt, 1521.

$C_{16}H_{27}O_5N$ Heliotrin, structure, a-137.

$C_{16}H_{32}ON_2$ Diethylaminoethanol ether of lupinine, synthesis, properties, picrate, iodomethylate, 132.

$C_{16}H_{33}ON$ Amide of palmitic acid, preparation, a-680.

16. IV

$C_{16}H_9O_2NCl_4$ 1-p-Phthalanilo-1,2,2,2-tetrachloroethane, preparation, properties, 643.

$C_{16}H_{10}O_4NCl$ p-Phthalanilochloro acetic acid, preparation, properties, 643.

$C_{16}H_{13}O_3N_3S$ Product of condensation of pyromizole with salicyl aldehyde, 1373.

$C_{16}H_{17}O_2N_2Cl_3$ 1) α, α -(2,2'-Dimethoxy-5,5'-diaminodiphenyl)- β, β, β -trichloroethane, preparation, properties, hydrochloride, acetyl derivative, a-567.

2) α, α -(3,3'-Diamino-4,4'-dimethoxydiphenyl)- β, β, β -trichloroethane, preparation, properties, hydrochloride, acetyl derivative, a-567.

$C_{16}H_{20}O_2N_2S$ Methylbetaine of 4-(p-tolyl sulfamino)-N,N-dimethylaniline, preparation, properties, a-680.

Group C_{17}

17. I

$C_{17}H_{14}$ 1,5-Diphenylpenten-3-yne-1, preparation, oxidation, a-154.

17. II

$C_{17}H_{12}O$ Phenyl- α -naphthyl ketone, preparation, 683.

$C_{17}H_{14}O$ Oxide of 1,5-diphenylpenten-3-yne-1, preparation, properties, a-154.

$C_{17}H_{16}O$ 1,5-Diphenylpenten-1-ol-3, synthesis, properties, cleavage by caustic potash, acetylation, dehydration, a-153.

$C_{17}H_{16}O_3$ Trimethoxyphenanthrene, formation, 140.

C₁₇H₁₆O 2-Benzoyl-p-cymene, preparation, properties, oxidation, a-563.

C₁₇H₁₈O₃ 4-Hydroxy-3-methoxyphenylethylbenzyl ethyl ketone, synthesis, properties, taste, 2,4-dinitrophenylhydrazine, 1580.

17. III

C₁₇H₁₂O₂N₂ 1) Quinoxaline derivative of 2-methyl-1,2,3,4-tetrahydronaphthalene-ol-2-trione-1,3,4, synthesis, properties, 451.

2) Azine derivative, preparation by oxidation of C₁₇H₁₄O₂N₂, 179.

C₁₇H₁₄O₂N₂ Azine derivative, formation by action of o-phenylenediamine in process of cleavage of 2-methyl-1,4-naphthoquinone oxide, 178, oxidation, 179.

C₁₇H₁₄O₃N₂ Product of reaction of o-lactylphenylglyoxylic acid with o-phenylenediamine, 171.

C₁₇H₁₇ON 1,5-Diphenyl-1-aminopentene-4-one-3, preparation, action of acetylene dimagnesium bromide, 263.

C₁₇H₁₈ON₂ 2-(β-Phenylethyl)-5-ethoxybenzimidazole, synthesis, properties, hydrochloride, 1560.

C₁₇H₂₅ON 1) O-Cresyllupinine (ortho), synthesis, properties, picrate, iodo-methylate, 132.

2) O-Cresyllupinine (para), synthesis, properties, picrate, iodo-methylate, 132.

17. IV

C₁₇H₁₁ON₂Cl Quinoxaline derivative of 2-chloro-2-methyl-1,2,3,4-tetrahydronaphthalene-1,3,4-trione, formation, reaction with potassium iodide, 439.

C₁₇H₂₀O₃NP Diphenylpiperidyl phosphonate, preparation, properties, 117.

C₁₇H₂₄O₃N₂S β-Diethylaminoethyl ester of ar-4-nitrotetrahydro-1-naphthalene-carbothiolic acid, preparation, hydrochloride, 111.

C₁₇H₂₆O₃N₂S β-Diethylaminoethyl ester of ar-4-aminotetrahydro-1-naphthalene-carbothiolic acid, preparation, hydrochloride, citrate, 111; anesthetic properties, 109.

C₁₇H₂₆NIS Methyl iodide of 2-nonylbenzothiazole, synthesis, properties, 1524.

C₁₇H₃₈O₄N₂S₂ γ, γ'-(Diethylaminodipropyl)-

disulfone-dimethylmethane, preparation, properties, dichlorohydrate, 839.

17. V

C₁₇H₂₅O₃N₂ClS Hydrochloride of β-diethylaminoethyl ester of ar-4-nitrotetrahydro-1-naphthalene-carbothiolic acid, preparation, properties, reduction, 111.

C₁₇H₂₇ON₂ClS Hydrochloride of diethylaminoethyl ester of ar-4-aminotetrahydro-1-naphthalene carbothiolic acid, preparation, 121.

Group C₁₈

18. I

C₁₈H₂₆ 5,6-Dicyclohexyl-1,5-hexadiene-3-yne, preparation, hydrogenation, hydration, a-230.

C₁₈H₃₀ 1,3,5-Tri-sec.-butylbenzene, formation, 301.

C₁₈H₃₄ 1) 1,2-Dicyclohexylhexane, formation, properties, a-230.

2) Product of cleavage of lignin by metallic sodium, 1576.

18. II

C₁₈H₁₅Bi Triphenylbismuth, reaction with p-nitrophenols, p-cresol, 2,4,6-trichlorophenol, a-106.

C₁₈H₁₆O 3-Keto-1,2,3,11,12,12a-hexahydrochrysene, synthesis, properties, oxime, 296.

C₁₈H₁₆O₅ Trimethoxyphenanthrene carboxylic acid, formation, 140.

C₁₈H₁₈O₄ 1,8-Difuryl-3,6-dimethyloctadiene-1,7-in-4-diol-3,6, synthesis, properties, 261; acetic ether, 262.

C₁₈H₂₀O₃ 4-Hydroxy-3-methoxyphenylethyl-β-phenylethyl ketone, synthesis, properties, taste, 1580, 2,4-dinitrophenylhydrazine, 1581.

C₁₈H₂₆O 1) Cyclohexyl-hexahydrobenzylvinylethynyl carbinone, preparation, properties, hydrogenation, dehydration, a-228.

2) 1,2-Decyclohexyl-3-methyl-1-cyclopenten-5-one, preparation, properties, ozonization, 2,4-dinitrophenylhydrazine, a-232.

3) 5,6-Dicyclohexyl-1,5-hexadiene-4-one, preparation, properties,

hydrogenation, cyclization, 2,4-dinitrophenyl hydrazone, a-231.

$C_{18}H_{28}O_2$ Dimer of 2,2-dimethyl-4-vinyl-3,6-dihydropyran, preparation, properties, hydrogenation, 1772.

$C_{18}H_{32}O$ 5,6-Dicyclohexylhexane-4-one, preparation, a-231.

$C_{18}H_{34}O$ Butylcyclohexyl-hexahydrobenzyl carbinol, preparation, properties, a-229.

$C_{18}H_{34}O_2$ 1) 1-Butoxy-6- β -butoxyethyloctadiene-3,7, formation, properties, a-352.

2) Oleic acid, bismuth salt, preparation, properties, 1102; antimony salt, preparation and properties, 1105.

$C_{18}H_{34}O_3$ Dibutoxypentenyl ether, preparation, 71.

$C_{18}H_{36}O_2$ Stearic acid, bismuth salt, antimony salt, prep., prop., 1102, 1105.

$C_{18}H_{38}O_3$ Dioctyl ether of dimethylene glycol, preparation, properties, 1478.

18. III

$C_{18}H_{14}ON_2$ 1,1',2'-(N-Phenylanthranil)pyridine, preparation, properties, a-195.

$C_{18}H_{14}N_2S_2$ Product of reaction of alkali on bis-(methylchloride) of bis-(benzothiazolyl)-1,2-ethylene, 1526.

$C_{18}H_{18}O_2Cl$ α -(3-Chlorocrotyl)- γ -(1-naphthyl)-butyric acid, synthesis, reaction with sulfuric acid, 296.

$C_{18}H_{26}ON_2$ 4-(γ -Diethylaminopropyl)-amino-1-methoxynaphthalene, preparation, properties, picrate, dihydrochloride, 952.

$C_{18}H_{27}NS$ 2-Undecylbenzothiazole, synthesis of quaternary salt, 1524.

$C_{18}H_{30}O_2N_2$ Diethylaminoethylsalsolidine, synthesis, properties, hydroiodide, picrate, 1584.

18. IV

$C_{18}H_{15}O_5N_2P$ Diphenyl-p-nitroanilino-phosphonate, preparation, properties, 116.

$C_{18}H_{16}O_3NP$ Diphenylanilinophosphonate, preparation, properties, 116.

$C_{18}H_{16}N_2Cl_2S_2$ bis-Methylchloride of bis-(benzothiazolyl)-1,2-ethylene, synthesis, properties, reaction with alkali, 1526.

$C_{18}H_{16}N_2I_2S_2$ bis-(Methyliodide) of bis-(benzothiazolyl)-1,2-ethylene, synthesis, properties, 1526.

$C_{18}H_{17}O_4N_2Cl_3$ α,α -(2,2'-Diacetamino-4,4'-dioxidiphenyl)- β,β,β -trichloroethane, preparation, properties, methylation, a-569.

$C_{18}H_{18}O_2N_4S$ Product of condensation of promizole with p-dimethylaminobenzaldehyde, 1373.

$C_{18}H_{18}N_2Cl_2S_2$ bis-(Methylchloride) of bis-(benzothiazolyl)ethane, synthesis, properties, 1525.

$C_{18}H_{18}N_2I_2S_2$ bis-(Methyl iodide) of bis-(benzothiazolyl) ethane, synthesis, properties, 1526.

$C_{18}H_{26}O_3N_2S$ 1) γ -Diethylaminopropyl ester of ar-3-nitrotetrahydronaphthalene-1-carbothiolic acid, hydrochloride, 113.

2) γ -Diethylaminopropyl ester of ar-4-nitrotetrahydronaphthalene-1-carbothiolic acid, hydrochloride, 112.

$C_{18}H_{26}ON_2S$ 1) γ -Diethylaminopropyl ester of ar-3-aminotetrahydronaphthalene-1-carbothiolic acid, hydrochloride, 113.

2) γ -Diethylaminopropyl ester of ar-4-aminotetrahydronaphthalene-1-carbothiolic acid, hydrochloride, 112.

18. V

$C_{18}H_{27}O_3N_2ClS$ 1) Hydrochloride of γ -diethylaminopropyl ester of ar-3-nitrotetrahydronaphthalene-1-carbothiolic acid, preparation, properties, reduction, 113.

2) Hydrochloride of γ -diethylaminopropyl ester of ar-4-nitrotetrahydronaphthalene-1-carbothiolic acid, preparation, properties, reduction, 112.

$C_{18}H_{29}ON_2ClS$ 1) Hydrochloride of γ -diethylaminopropyl ester of ar-3-aminotetrahydronaphthalene-1-carbothiolic acid, preparation, properties, 114; anesthetic properties, 109.

2) Hydrochloride of γ -diethylaminopropyl ester of ar-4-aminotetrahydronaphthalene-1-carbothiolic acid, preparation, 112; anesthetic properties, 109.

Group C19

19. II

- C₁₉H₁₄O Fuchson, preparation, bisulfite derivative, carbinol derivative, hydrated form, 911; structure and color properties, 1163.
- C₁₉H₁₄O₂ Benzaurin, structure and color properties, 1163.
- C₁₉H₁₄O₃ Aurin, structure and color properties, 1163.
- C₁₉H₁₅Cl Triphenylchloromethane, formation, 685.
- C₁₉H₁₆O 4-Hydroxytriphenylmethane, synthesis, 913.
- C₁₉H₁₆O₂ 4-Hydroxytriphenylcarbinol, synthesis, 909, dehydration, 911.
- C₁₉H₁₆N₂ Benzaldiphenylhydrazone, azotization, 895.
- C₁₉H₂₂O₃ 4-Hydroxy-3-methoxyphenylethyl-γ-phenylpropyl ketone, synthesis, properties, taste, 2,4-dinitrophenylhydrazone, 1581.
- C₁₉H₂₂N₃ 4-(8-Diethylamino-α-methylbutyl) amino quinaldine, synthesis, properties, a-122.
- C₁₉H₁₆O₄ Di-sec.-octylmalonate, formation, a-377.
- C₁₉H₁₆O₁₁ Methyl ester of heptamethylglucosido-2-arabinose, preparation, hydrolysis, a-573.

19. III

- C₁₉H₁₄O₃N₂ Quinoxaline derivative of acetylated 2-methyl-1,2,3,4-tetrahydronaphthalene-ol-2-trione-1,3,4, synthesis, properties, 453.
- C₁₉H₁₆ON₂ N'-Benzoyldiphenyl hydrazine, azotization, 895.
- C₁₉H₁₆O₅N₄ p-Nitrobenzyl ether of phthiocol, 773.
- C₁₉H₁₆O₄Cl β-(1-Naphthyl)-ethyl-(3-chlorocrotyl)-malonic acid, synthesis, properties, decarboxylation, ethyl ester, 295.
- C₁₉H₂₁O₃N Isothebaine, investigation of structure, 155.
- C₁₉H₃₂O₂N₂ Diethylaminopropyl salsolidine, synthesis, properties, hydroiodide, picrate, 1585.

19. IV

- C₁₉H₁₈O₃NP Diphenylbenzylaminophosphonate,

preparation, properties, 117.

- C₁₉H₂₄O₅NP DI-(o-Methoxyphenyl)-piperidylphosphonate, preparation, properties, 118.

- C₁₉H₃₀NIS Methyl iodide of 2-undecylbenzothiazole, synthesis, properties, 1521.

Group C20

20. II

- C₂₀H₁₄Hg Dinaphthylmercury, reaction with dimethylanilinehydrochloride, 1136.
- C₂₀H₁₆O₂ Methoxyfuchson, preparation, bisulfite derivatives, carbinol derivatives, hydrated form, 912; structure and color properties, 1163.
- C₂₀H₁₆O₃ 3-Methoxybenzaurin, synthesis, properties, 901, structure and color properties, 1163.
- C₂₀H₁₆O₄ Monomethoxyaurin, structure and color properties, 1163.
- C₂₀H₁₆O 4-Hydroxy-3-methoxytriphenylmethane, synthesis, 913.
- C₂₀H₁₆O₂ 4-Hydroxy-3-methoxytriphenylcarbinol, synthesis, 910, dehydration, 912.
- C₂₀H₁₆O₃ 3-Methoxy-4,4'-dihydroxytriphenylmethane, synthesis, oxidation, 900.
- C₂₀H₁₆N₂ 1) Benzalbenzylphenylhydrazone, azotization, 895.

2) Acetophenone-diphenyl hydrazone, azotization, 895.

- C₂₀H₂₂O₃ 2-Hydroxy-2-methylchromyl ether, formation, 523.

- C₂₀H₂₄O₂ Dimer of methyl ester of 2-allylphenol, preparation, properties, a-103.

- C₂₀H₂₄O₃ 4-Hydroxy-3-methoxyphenylethyl-δ-phenylbutyl ketone, synthesis, properties, taste, 2,4-dinitrophenyl hydrazone,

20. III

- C₂₀H₁₂N₂Cl₂ Azo derivative 1-chloronaphthylamine-2, formation, reduction, dihydrochloride, 272.
- C₂₀H₁₄O₂N₂ N-Diphenylaminophthalimide, azotization, 893.
- C₂₀H₁₅O₃N N-Benzoyldiphenylamino-2-carboxylic acid, preparation, a-193.

$C_{20}H_{17}O_2N$ 1) Anilide of 2-phenylphenoxyacetic acid, preparation, properties, 1149.

2) 4-Phenylphenoxy acetanilide, preparation, properties, 1145.

$C_{20}H_{17}O_2N_3$ 1) 3-Nitrobenzalbenzylphenyl hydrazone, azotization, 893.

2) 4-Nitrobenzalbenzylphenyl hydrazone, azotization, 893.

$C_{20}H_{18}ON_2$ N'-Benzoyl-N-benzyl-N-phenyl hydrazone, azotization, 893.

$C_{20}H_{18}O_2Hg_2$ Di-o-tolylmercuro-1,3-dihydroxy benzene, preparation, a-579.

$C_{20}H_{23}O_3N$ 1) o-Methylisothebaine, preparation, iodomethylate, Hoffmann degradation, 137.

2) Des-N-methylisothebaine, preparation, picrate, iodomethylate, 141.

$C_{20}H_{25}ON$ o-Naphthyl lupinine (α), synthesis; properties, picrate, iodomethylate, 131.

$C_{20}H_{27}O_4Cl$ β -(m-Tolyl)-ethyl- γ -chlorocrotylmalonate, synthesis, saponification, 294.

20. IV

$C_{20}H_{14}O_2NCl_3$ Anilide of 2-(4'-chlorophenyl)-4,6-dichlorophenoxyacetic acid, preparation, properties, 1151.

$C_{20}H_{14}O_2NBr_3$ 1) 4-(4'-Bromophenyl)-2,6-dibromophenoxyacetanilid, preparation, properties, 1148.

2) Anilide of 2-(4'-bromophenyl)-2,6-dibromophenoxyacetic acid, preparation, properties, 1151.

$C_{20}H_{15}O_2NCl_2$ 2-Phenyl-2,6-dichlorophenoxyacetanilide, preparation, properties, 1150.

$C_{20}H_{15}O_2NBr_2$ Anilide of 4-phenyl-2,6-dibromophenoxyacetic acid, preparation, properties, 1147.

$C_{20}H_{16}O_2NCl$ 1) Anilide of 2-phenyl-6-chlorophenoxyacetic acid, preparation, properties, 1150.

2) Anilide of 2-phenyl-4-chlorophenoxyacetic acid, preparation, properties, 1149.

3) 4-Phenyl-2-chlorophenoxyacetanilide, preparation, properties, 1146.

$C_{20}H_{16}O_2NBr$ 1) 2-Phenyl-4-bromophenoxyacetanilide, preparation, properties, 1150.

2) 4-Phenyl-2-bromophenoxyacetanilide, preparation, properties, 1146.

$C_{20}H_{17}OBrHg_2$ Di-o-tolylmercuro-4-bromo-1-hydroxybenzene, preparation, a-578.

$C_{20}H_{17}O_3NHg_2$ 1) Di-o-tolylmercuro-2-nitro-1-hydroxybenzene, preparation, a-578.

2) Di-o-tolylmercuro-4-nitro-1-hydroxybenzene, preparation, a-579.

3) p-Ditolylmercuro-4-nitro-1-hydroxybenzene, preparation, a-577.

$C_{20}H_{20}O_5NP$ Di-(o-methoxyphenyl)-anilino phosphonate, preparation, properties, 118.

$C_{20}H_{21}O_4N_2Cl_3$ α,α -(2,2'-Diacetoamino-4,4'-dimethoxydiphenyl)- β,β,β -trichloroethane, preparation, properties, a-569.

$C_{20}H_{24}O_2N_2S$ Product of condensation of 4,4'-diaminodiphenyl sulfone with butyraldehyde, 1372.

$C_{20}H_{14}O_2NClBr_2$ 4-(4'-Bromophenyl)-2-chloro-6-bromophenoxyacetanilide, preparation; properties, 1148.

Group C₂₁

21. II

$C_{21}H_{18}O_4$ Dimethoxybenzaurin, structure and color properties, 1163.

$C_{21}H_{18}O_5$ Dimethoxyaurin, structure and color properties, 1163.

$C_{21}H_{21}N$ Tribenzylamine, reaction with chloramine, 275.

21. III

$C_{21}H_{16}OHg$ Product of reaction of benzalacetophenone with diphenyl mercury, 1132.

$C_{21}H_{16}O_2N_2$ N-Benzylanilino-phthalimide, azotization, 893.

$C_{21}H_{18}O_3N_2$ o-Phenylenediamine salt of quinoxaline derivative of phthalic acid, formation, properties, 422.

$C_{21}H_{21}O_7P$ Tri-(o-methoxy)-phenyl phosphate, preparation, properties, 116.

$C_{21}H_{22}ON_2$ N-(4-Dimethylamino- α -hydroxybenzyl)-diphenylamine, picrate, 1516.

$C_{21}H_{25}O_3N$ Des-N-methyl-o-methylisothebaine, formation, picrate, 138.

$C_{21}H_{32}ON_4$ 6-Acetamino-4-(δ -diethylamino- α -methylbutyl)-amino quinaldine, synthesis, properties, a-124.

$C_{21}H_{33}ON_3$ 6-Ethoxy-4-(6-diethylamino- α -methylbutyl)-amino quinaldine, synthesis, properties, a-122.

21. IV

$C_{21}H_{12}O_3NCl$ 1-Benzoylamino-4-chloro-anthraquinone, preparation, 757.

$C_{21}H_{12}O_3NBr$ 1-Benzoylamino-4-bromo-anthraquinone, preparation, 758.

$C_{21}H_{20}O_4N_2S_2$ N,N'-Di-(phenylamino-propyl)-disulfonedimethylmethane, preparation, properties, 840.

$C_{21}H_{20}O_5NP$ Diphenyl-p-carbethoxyanil-inophosphnate, preparation, properties, 117.

21. V.

$C_{21}H_{21}ON_2IS_2$ 1) [3-Ethylbenzothiazole-(2)]-[3-ethyl-6-hydroxybenzothiazole-(2)]-trimethine cyanine iodide, synthesis, spectrum absorption, 1159.

2) [3-Ethylbenzothiazole-(2)]-[3-ethyl-4-hydroxybenzothiazole-(2)]-trimethine cyanine iodide, synthesis, spectrum absorption, acetyl derivative, 1159.

$C_{21}H_{21}O_2N_2IS_2$ 1) Bis-[3-ethyl-6-hydroxybenzothiazole-(2)]-trimethine cyanine iodide, synthesis, spectrum absorption, diacetyl derivative, 1158.

2) Bis-[3-ethyl-7-hydroxybenzothiazole-(2)]-trimethine cyanine iodide, synthesis, spectrum absorption, 1158.

$C_{21}H_{21}O_4N_2IS_2$ Bis-[3-ethyl-4-hydroxybenzothiazole-(2)]-trimethine cyanine iodide, synthesis, diacetyl derivative, spectrum absorption, 1158.

Group C22

22. I

$C_{22}H_{16}$ 1,1-Di- α -naphthylethylene, formation, 686.

22. II

$C_{22}H_{20}O_6$ Trimethoxyaurin, structure and color properties, 1163.

$C_{22}H_{22}O_6$ Acetate of 1,8-difuryl-3,6-dimethyl-octadiene-1,7-in-4-diol-3,6, preparation, properties, 263.

$C_{22}H_{22}O_2$ Dimer of ethyl ester of 2-allyl-phenol, preparation, properties, a-103.

22. III

$C_{22}H_{15}O_4N$ 1) 2-Nitro-3,3-diphenyl-2,3-dihydro- α -naphthoquinone, preparation, properties, sodium salt, 1547.

2) 2-Nitro-2-benzohydrylindanedione-1,3, preparation, isomerization, action of alkali, 1543.

$C_{22}H_{19}N_3S_3$ 2-Bis-(α -methylaminophenyl-mercapto)-methylbenzothiazole, synthesis of quaternary salt, 1526.

$C_{22}H_{34}O_2S_2$ Acetylenic glycol, formation during condensation of 2-methylhexahydro-1-thiochroman-4-one with acetylene, a-644.

$C_{22}H_{35}NS$ 2-Pentadecylbenzothiazole, synthesis of quaternary salt, 1519.

22. IV

$C_{22}H_{16}O_4N_2S$ Product of condensation of 4,4'-diaminodiphenylsulfone with furfural, 1372.

$C_{22}H_{20}O_6N_2S_2$ 1) Disulfide of ar-3-nitrotetrahydro-1-thionaphthoic acid, preparation, properties, 113.

2) Disulfide of ar-4-nitrotetrahydro-1-naphthalene-carbothiolic acid, preparation, properties, 110.

$C_{22}H_{29}O_7N_4S$ Methosulfatemetethylate of α -methylisothebaine, preparation, 138.

Group C23

23. II

$C_{23}H_{18}O$ 1) 3,3,5-Triphenylpentyn-4-one-2, formation, oxidation, semicarbazone, a-203.

2) Methylphenylacetylenyl-acetophenone, formation, properties, oxidation, 946.

$C_{23}H_{20}O_2$ 1) Methyl-diphenylphenylacetylenylethylene glycol (symm.), synthesis, ketonic cleavage, action of sulfuric acid, a-197.

2) Diphenylmethyl-phenylacetylenylethylene glycol, (asymm.), synthesis, transformation in presence of sulfuric acid, 941.

3) 2,3,5-Triphenylpenten-3-ol-2-one-5, formation, properties, oxidation, rearrangement by action of sulfuric acid, a-207.

4) 2,4,5-Triphenyl-5-methyl-2-hydroxydihydrofuran-2,5-formation, properties, chloroplatinate, chloroaurate, ketal, a-206.

23. III

- C₂₃H₁₁O₃N Anthrapyridone-acridone, action of alkali in presence of sodium hydrosulfite, 325, formation, 327.
C₂₃H₁₃O₄N ω-Carboxylic acid of 9-methylene-anthrone-acridone, synthesis, properties, titration, salts, methyl ester, oxidation in alkaline medium, 326.
C₂₃H₂₇O₄Cl β-(1-Naphthyl)-ethyl-(3-chlorocrotyl)-malonic ester, synthesis, properties, saponification, 295.

23. IV

- C₂₃H₂₂N₃IS₃ Methyl iodide of 2-bis-(o-methylaminophenylmercapto)-methylbenzothiazole, synthesis, properties, 1526.
C₂₃H₂₄O₇NP Di-(o-methoxyphenyl)-p-carbethoxyphenylaminophosphonate, preparation, properties, 118.
C₂₃H₃₈NCIS Methyl chloride of 2-pentadecylbenzothiazole, synthesis, properties, 1525.
C₂₃H₃₈NIS Methyl iodide of 2-pentadecylbenzothiazole, synthesis, properties, 1525.
23. V
C₂₃H₂₀O₅N₃SP Diphenyl-N-sulfanilimido-pyridylphosphonate, preparation, properties, 117.
C₂₃H₂₂O₄N₃IS₂ [3-Ethyl-4-hydroxybenzothiazole-(2)]-[3-ethyl-6-nitrobenzothiazole-(2)]-trimethine cyanine iodide, synthesis, properties, spectrum absorption, 1160.
C₂₃H₂₃O₂N₂IS₂ Diacetyl derivative of [3-ethylbenzothiazole-(2)]-[3-ethyl-5-hydroxybenzothiazole-(2)]-trimethine cyanine iodide, synthesis, spectrum absorption, 1159.

Group C₂₄

24. II

- C₂₄H₁₈O₅ Acid phthalate of diphenylbutenediol, preparation, properties,

chinchoninate, optically active esters, 601.

- C₂₄H₂₀Pb Tetraphenyl lead, reaction with phenols, a-108.
C₂₄H₂₀Sn Tetraphenyl tin, reaction with phenols, a-107.
C₂₄H₃₂O₂ Dimer of isopropyl ester, preparation, properties, a-103.
C₂₄H₃₂O₁₅ Hexa-acetylglucosido-3-glucal, preparation, oxidation, bromination, chlorination, a-553.

24. III.

- C₂₄H₁₈O₃N Methylanthrapyridone-acridone, synthesis, properties, dyeing properties, 320; action of alkaline solution of sodium hydrosulfite, 325.
C₂₄H₁₅O₄N 1) 1-N-9-Anthrapyridone-N-tolyl-2-carboxylic acid, synthesis, properties, action of chlorosulfonic acid, 320.
2) ω-Carboxylic acid of 9-methyleneanthrone-4'-methylacridone, synthesis, properties, 327.
C₂₄H₁₇O₅N Anthraquinone-1-N-acetyl-tolyl-amino-2-carboxylic acid, synthesis, properties, action of alkali, 320.
C₂₄H₃₂O₁₅Cl₂ 1,2-Dichlorohexa-acetylglucosido-3-glucose, preparation, properties, reaction with silver carbonate, a-556.
C₂₄H₃₂O₁₅Br₂ 1,2-Dibromohexa-acetyl glucosido-3-glucose, preparation, properties, a-555.
C₂₄H₃₃O₁₆Cl Mono-2-chlorohexa-acetylglucosido-3-glucose, preparation, properties, reaction with lead oxide, a-556.
C₂₄H₃₉O₇N Delbine, separation, properties, 861.
C₂₄H₃₉NS 2-Heptadecylbenzothiazole, synthesis of quaternary salts, 1525.

24. IV

- C₂₄H₄₀NCIS Ethylchloride of 2-pentadecylbenzothiazole, synthesis, properties, 1525.
C₂₄H₄₀NIS 2-Pentadecylbenzothiazole, synthesis, properties, 1525.

24. V

- C₂₄H₂₂O₈N₄S₂As₂ (3,3)-p-Diaminobenzo-sulfamido-(4,4)-dihydroxyarsinobenzene,

synthesis, properties, chemotherapeutic properties, 314.

Group C₂₅

25. II

C₂₅H₂₈O₈ Hexamethoxyaurin, structure and color properties, 1163.

25. III

C₂₅H₂₄ON₂ N-(4-Dimethylamino- α -hydroxybenzyl)-N-phenyl-2-naphthylamine, synthesis, picrate, 1517.

25. IV

C₂₅H₃₄O₈N₂S₂ Y,Y'-Di-(p-acetaminophenoxypentyl)-disulfone-dimethylmethane, preparation, properties, 840.

C₂₅H₃₄NCIS Benzyl chloride of 2-undecylbenzothiazole, synthesis, properties, 1524.

C₂₅H₃₄NIS Benzyl iodide of 2-undecylbenzothiazole, synthesis, properties, 1524.

C₂₅H₄₂NCIS Methyl chloride of 2-heptadecyl benzothiazole, synthesis, properties, 1525.

C₂₅H₄₂NIS Methyl iodide of 2-heptadecylbenzothiazole, synthesis, properties, 1525.

25. V

C₂₅H₂₄O₈N₄S₃As₂ Product of reaction of 3,3-p-diaminobenzosulfamido-(4,4)-dihydroxyarsino-benzene with rongalite, 315.

C₂₅H₂₅O₄N₂IS₂ Diacetyl derivative of bis-[3-ethyl-5-hydroxybenzothiazole-(2)]-trimethine cyanine iodide, synthesis, spectrum absorption, 1158.

Group C₂₆

26. II

C₂₆H₃₃N₃ 4-(δ -Diethylamino- α -methylbutyl)-amino-2-styrylquinoline, synthesis, properties, a-122.

C₂₆H₃₅N₃ 4-(δ -Diethylamino- α -methylbutyl)-amino-2-(β -phenylethyl)-quinoline, synthesis, properties, a-125.

C₂₆H₃₆O₁₇ Heptaacetyl-glucosido-3-(2-desoxy)-glucose, preparation, properties, a-555.

26. III

C₂₆H₁₄O₃N₂ Product of action of o-phenylenediamine on o-pyruvial-phenyl-glyoxylic acid, 426.

C₂₆H₁₆ON₂ 10,9'-Acridylacridone, synthesis, properties, a-193.

C₂₆H₂₀O₃N₂ 1) N-phenylanthranicylo-N-phenyl-anthranilic acid, preparation, properties, cyclization, a-191.

2) Anhydride of diphenylamino-2-carboxylic acid, preparation, properties, rearrangement by action of acetone, a-190.

C₂₆H₃₈O₁₂S₄ Dixanthogenide of diacetone glucose, preparation, 821.

C₂₆H₄₃O₇N Amino alcohol of delartine, preparation, properties, salt, action of methyl iodide, oxidation, hydrogenation, 1394.

26. IV

C₂₆H₁₄ON₂Cl₂ 3,3'-Dichloro-10,9'-acridylacridone, synthesis, properties, a-195.

C₂₆H₁₈O₃N₂Cl₂ 1) N-Phenyl-p-chloroanthranicylo-N-phenyl-p-chloroanthranilic acid, preparation, properties, cyclization, a-192.

2) Anhydride of 5-chlorodiphenylamino-2-carboxylic acid, preparation, properties, rearrangement by action of acetone, a-190.

C₂₆H₃₈O₂N₂S Product of condensation of 4,4'-diamino-diphenylsulfone with heptyl aldehyde, 1372.

Group C₂₇

27. II.

C₂₇H₅₂O₄ Dilauryl malonate, formation, a-377.

27. III.

C₂₇H₁₃O₃N Benzanthracyridone-acridone, synthesis, properties, color properties, 321, action of alkaline solution of sodium hydrosulfite, 327.

C₂₇H₁₅O₄N 1-N-9-Anthracyridone-N-(β -naphthalyl)-2-carboxylic acid, synthesis, properties, action of sulfuric acid, 321.

2) ω -Carboxylic acid of 9-methylene-anthrone-benzo-acridine, synthesis, properties, 327.

C₂₇H₁₇O₅N Anthraquinone-1-N-acetyl-(β -

-naphthylamino)-2-carboxylic acid, synthesis, properties, action of alkali, 321.

$C_{27}H_{37}ON_3$ 6-Methoxy-4-(δ -diethylamino- α -methylbutyl)-amino-2-(β -phenylethyl)-quinoline, synthesis, properties, a-124.

$C_{27}H_{45}O_7N$ Delphatine, separation, properties, perchlorate, iodomethylate, hydrolysis, acetyl derivatives, 859.

Group C₂₈

28. III

$C_{28}H_{36}ON_4$ 6-Acetamino-4-(δ -diethylamino- α -methylbutylamino)-2-styryl-quinoline, synthesis, properties, a-124.

$C_{28}H_{37}ON_3$ 6-Ethoxy-4-(δ -diethylamino- α -methylbutyl)-amino-2-styryl-quinoline, a-123.

$C_{28}H_{39}ON_3$ 6-Ethoxy-4-(δ -diethylamino- α -methylbutyl)-amino-2-(β -phenylethyl)-quinoline, synthesis, properties, a-125.

28. IV

$C_{28}H_{22}O_5N_2Cl_2$ 1) N-4'-Methoxyphenyl-4-chloroanthranoylo-n-4'-methoxyphenyl-4-chloroanthranilic acid, preparation, properties, a-193.

2) Anhydride of 4'-methoxy-5-chlorodiphenylamino-2-carboxylic acid, preparation, properties, rearrangement, a-191.

$C_{28}H_{24}O_4N_2S$ Product of condensation of 4,4'-diaminodiphenylsulfone with vanillin, 1373.

28. V.

$C_{28}H_{26}O_8N_4S_2As_2$ (3,3)-p-Diacetobenzol-sulfamido-(4,4)-dihydroxyarsenobenzene, synthesis, properties, 314.

Group C₂₉

29. III

$C_{29}H_{47}O_8N$ Acetyl delphatine, preparation, properties, hydrolysis, 861.

29. IV

$C_{29}H_{42}NClS$ Benzyl chloride of 2-pentadecylbenzothiazole, synthesis, properties, 1525.

$C_{29}H_{42}NIS$ Benzyl iodide of 2-penta-

decylbenzothiazole, synthesis, properties, 1525.

Group C₃₀

30. IV

$C_{30}H_{30}O_2N_4S$ Product of condensation of 4,4'-diaminodiphenylsulfone with p-dimethylamino-benzaldehyde, 1372.

Group C₃₁

31. IV

$C_{31}H_{48}NClS$ Benzyl chloride of 2-heptadecylbenzothiazole, synthesis, properties, 1525.

$C_{31}H_{48}NIS$ Benzyl iodide of 2-heptadecylbenzothiazole, synthesis, properties, 1525.

Group C₃₂

32. II.

$C_{32}H_{22}O_8$ Dipthalate of diphenyl-butinediol, preparation, properties, chinchonidine salt, optically active ester, 603.

32. IV.

$C_{32}H_{48}O_2N_2S$ Product of condensation of 4,4'-diaminodiphenylsulfone with decanal, 1372.

Group C₃₄

34. IV

$C_{34}H_{24}O_2N_2S$ Product of condensation of 4,4'-diamino-diphenylsulfone with α -naphthaldehyde, 1372.

Group C₃₆

36. II

$C_{36}H_{30}O_2$ Tetrastryrylbutinediol, synthesis, properties, 263.

36. III

$C_{36}H_{36}O_2N_2$ 3,6-Distyryl-1,8-diphenyl-1,8-diamino-octane-4-diol-3,6, synthesis, properties, picrate, 263.

$C_{36}H_{53}O_{11}N_2$ Delartine, isolation, properties, saponification, 1394.

36. IV

$C_{36}H_{38}O_2N_4S$ Product of condensation of 4,4'-diaminodiphenylsulfone with cotarnine, 1372.

36. V

$C_{36}H_{30}O_8N_2SP_2$ Bis-(diphenylphosphonate)-

-p,p'-diaminodiphenylsulfone, preparation, properties, 117.

Group C₄₀

40. I.

C₄₀H₃₂ Product of reaction of trichloroethylene with benzene, 657.